



COMPUTER-AIDED DESIGN AND DOCUMENTATION OF INSTRUMENTATION SYSTEMS

J. L. Dorris

ARO, Inc.

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**ENGINE TEST FACILITY
ARNOLD ENGINEERING DEVELOPMENT CENTER
AIR FORCE SYSTEMS COMMAND
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FOREWORD

The research reported herein was sponsored by Headquarters, Arnold Engineering Development Center (AEDC), Air Force Systems Command (AFSC).

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ABSTRACT

A system of digital computer programs developed to aid in the design and documentation of instrumentation systems is described. Included are brief descriptions of system concepts and capabilities, required system inputs, explanations of system outputs and information contained therein, and system utilization. This system is currently in use by the ETF J-Instrument Branch of the Arnold Engineering Development Center.

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SECTION I INTRODUCTION

Testing of rocket and jet engines under simulated altitude conditions at Arnold Engineering Development Center usually requires the acquisition of several hundred channels of data per test. A major portion of these data consists of pressures and temperatures which are used to determine engine performance and test cell environment. The nature of such tests dictates that like measurements be made at several different locations on the engine and in the test cell. The specific measurements which are made are dependent on the type of information desired for the test program.

Test programs may require from one week to as high as two years of test time, and turnaround time between test programs must be held to a minimum. Therefore, it is not feasible to permanently install complete instrumentation systems. However, since all test programs require large quantities of certain types of measurements, it is feasible to permanently install, and document by engineering drawings, basic instrumentation system components and then utilize these components as required by the test programs. All permanently installed components are connected to interconnection devices which allow for complete versatility of equipment usage and almost limitless configurations of the equipment to meet different test program instrumentation requirements.

The permanently installed instrumentation equipment associated with a test cell is grouped into three major portions: (1) wiring, or hard-wired signal conditioners, used to route signals from permanent instrumentation connection points in the test cell or area to an interconnection device, (2) signal conditioning devices having both inputs and outputs wired to the interconnection device, and (3) recording or readout devices having inputs wired to the interconnection device.

Complete measurement systems are built up by connecting transducers to the permanently installed components using specially fabricated cabling and then interconnecting (patching) the permanent components to establish the desired signal conditioning and recording and/or readout configuration.

Engineering releases (called an Instrument Book) document the measurement systems necessary for a test program and are used to accomplish the installation, wiring, interconnecting, and setting up of the required instrumentation systems. The Instrument Book contains

information such as measurement nomenclature, transducer assignments, cabling to be fabricated for connection of the transducer to a permanent instrumentation connection point, the specific permanent instrumentation components required, the exact required interconnection of components, setup of signal conditioners and recording and/or readout devices, data reduction constants and methods, transducer calibration data, and sketches or drawings which show the physical location of each transducer or pickup. A new Instrument Book is prepared and released for each test program and is revised when the applicable test program requirements change.

The task of compiling an Instrument Book consists largely of preparing listings of the specific hardware used for each measurement, specifying the interconnections which must be made to connect the different components of the measurement channel, and maintaining a running inventory of the equipment that has been used and that which remains available. This task necessarily entails a large amount of manual bookkeeping and the transferring of information from one form to another. To eliminate as many of these manual manipulations as possible, a system of computer programs was developed to aid in the design and documentation of instrumentation systems. The concept of operation, information utilized, information obtained, and additional (and planned additional) capabilities of this computer program system are described in this report.

SECTION II APPROACH

To use computers in the design and documentation of instrumentation systems, sufficient information must be supplied concerning the desired configuration and the available equipment. To accomplish this, "model" instrumentation systems and reference files were established. These systems and files are discussed in the following paragraphs.

2.1 MODEL INSTRUMENTATION SYSTEMS

The first step taken was to establish model instrumentation systems, called Typical Hookups (Fig. 1, Appendix I). Each Typical Hookup consists of a specific type of transducer, signal conditioning equipment, readouts and/or recording devices, and the necessary interconnecting wiring. It should be noted that a Typical Hookup requires only certain

types of equipment rather than specific pieces of hardware. The equipment specified on a Typical Hookup, with the exception of the transducer and fabricated cable, consists of permanently installed instrumentation equipment and wiring.

The connection of the transducer to the permanent equipment is accomplished by the use of nonpermanent (fabricated) cabling. This cabling is fabricated for each measurement and each new test program in accordance with released drawings called Standard Cable Fabrications (Fig. 2). Each Standard Cable Fabrication provides the detailed information to permit fabrication of cabling which will interconnect certain types of transducers with a specific type of connection point which is a part of the permanent instrumentation system. Because of standardization of connection points, the same Standard Cable Fabrication may be used with many different Typical Hookups. Each Typical Hookup specifies a Standard Cable Fabrication to be used.

By translating the Typical Hookups into a form compatible with computer methods, these Typical Hookups were used to guide the computer in the design of actual measurement systems.

Drawings of each Typical Hookup and Standard Cable Fabrication were released for use during setup, checkout, and trouble shooting of measurement systems.

2.2 REFERENCE FILES FOR COMPUTER

Since Typical Hookups were to be utilized as guides for selection of measurement system hardware, reference files of Typical Hookups and files of all instrumentation hardware available for use were established. The instrumentation hardware was grouped into two categories: (1) transducers and (2) permanently installed equipment and/or wiring.

To establish the transducer file, all transducers were assigned a type code. The type code was representative of the type (Bridge, LVDT, etc.) of transducer and the connector and connector pin functions required for mating with the transducer. All electrically interchangeable transducers thus have identical type codes.

For the Equipment File, all permanently installed instrumentation hardware was categorized as to its specific function, and each individual unit or channel was assigned a type code so that all functionally interchangeable equipment has identical type codes. Additionally, each unit

or channel of equipment was assigned a unique identification code that corresponds to the actual number by which the equipment is identified and which is shown on the permanent equipment installation drawings.

By using these codes, reference files of measurement systems (Typical Hookups), the permanent equipment available for use (equipment inventory), and the available transducers were established for use by the computer. These files are discussed in the following paragraphs.

2.2.1 Reference File of Model Instrumentation Systems

The reference file of Typical Hookups contains the information required to guide the computer in the selection of transducers, signal conditioning equipment, readouts and/or recording devices, and equipment interconnections. This information consists of: (1) Typical Hookup identification number, (2) type code of required transducer, (3) identification number of the Standard Cable Fabrication to be utilized, (4) type code of cable or hardwired signal conditioner used to route signal from permanent test cell or area connection point to interconnection device, (5) type code or codes of desired interconnectable signal conditioners, (6) type code of readout or recording devices, (7) optional English description of signal routing, and (8) system points where interconnections are required.

The reference file of Typical Hookups is applicable to any test complex and need be prepared only once. Revision of the file is required only as Typical Hookups are added, deleted, or changed. Figure 3 is an example of a portion of the reference file of Typical Hookups. The information on each line is contained on a single 80-character punched card.

2.2.2 Reference File of Instrumentation Equipment

To supply information concerning equipment available for use, a reference file of all permanently installed instrumentation wiring and equipment was established. The information in this file consists of: (1) card number for identification and sorting of file punched cards, (2) identification code of the equipment, (3) English description of the equipment, (4) applicable equipment type code, (5) interconnection device and point to which the equipment input is connected, (6) interconnection device and point to which the equipment output is connected, and (7) a designation letter which identifies the test complex with which the equipment is associated. In addition, space is provided for the computer to enter the designation of the measurement systems to which the equipment is assigned.

The instrumentation equipment reference file is applicable to a given individual test complex and need be prepared only once for each complex. Revision of the file is required when equipment availability, installation, or assignment changes occur. Figure 4 is an example of a portion of the equipment reference file. The information is contained on a single 80-character punched card.

2.2.3 Reference File of Transducers

A reference file of transducers was established to provide information as to the available transducers, the range and function of each transducer, and the transducer calibration data. The information contained in this file for each transducer consists of: (1) type code assigned to the transducer, (2) transducer range in engineering units, (3) range units, (4) transducer manufacturer's name, (5) identification or serial number assigned to the transducer, (6) type of calibration/signal conditioning circuit used with transducer during calibration, (7) engineering units value of each of five standard calibration steps (if applicable), (8) units associated with calibration values, (9) the date on which the transducer will next be due for its next periodic calibration, and (10) code letter (if applicable) to identify individual bridges or outputs of a multiple-output transducer. It should be noted that each individual output of a multiple-output transducer is entered in the file as a separate transducer. The information for each transducer is contained in a total of five punched cards with each card corresponding to one of five standard calibration steps.

The reference file of transducers is applicable to all test complexes utilizing the transducer "pool" and is prepared only once. Revision of this file is required as transducer assignment changes are made or when transducers are recalibrated. Figure 5 is an example of a portion of the transducer reference file.

2.3 SYSTEM REQUIREMENTS

The quantity, types, and other pertinent information necessary to permit computer design of instrument systems were communicated to the computer by the use of punched cards referred to as input cards. These cards are used to provide the following information: (1) type of system (by Typical Hookup number) and range required for each measurement system, (2) the parameter designation, (3) measurement system nomenclature and transducer location sketch identification number, and (4) any preselected equipment. These cards must be prepared for each Instrument Book to be processed by the computer.

In addition, punched cards referred to as data reduction cards are used to provide such information as the methods for data reduction (type of calibrations, etc.) and to indicate the data reference. These cards must also be prepared (if data reduction information is desired) for each Instrument Book to be processed by the computer. Figure 6 is an example of both input and data reduction cards.

2.4 COMPUTER PROGRAM

The computer program system was prepared so that the previously discussed reference file of Typical Hookups would guide the computer in building up measurement systems. To build up a measurement system, the computer program selects required hardware from the transducer and equipment reference files in accordance with the input card and selected Typical Hookup requirements. The program allows for the preselection of all or any portion of the hardware to be used for a particular measurement parameter. If specific hardware is not preselected and specified by identification number on the input card, the computer program will select the transducer and hardware in accordance with the type codes specified on the Typical Hookup. When hardware is selected for use with a parameter, the computer program assigns it to that parameter so that it cannot be selected for use with any other parameter. Also, the interconnections which are required to connect the selected hardware in proper configuration are selected and tabulated by item number.

The result of a computer run with the program system is a series of listings which describes the instrumentation systems that are to be used for a test program. These listings are discussed in Section IV.

Details of the computer programs are not discussed in this report. However, listings of actual programs and program flow charts are contained in Appendix II for analysis if desired.

SECTION III INFORMATION UTILIZED BY COMPUTER PROGRAM

3.1 REFERENCE FILES

As discussed in Section II, the computer program utilizes the Typical Hookup, equipment, and transducer reference files. These files are prepared and maintained on punched cards, permitting easy

revision of the files. Prior to use, the files are transferred to magnetic tapes which are used to input the file information to the computer program.

3.2 NECESSARY INPUT INFORMATION

In addition to the reference files, the computer program must have additional information before it can design and document a measurement system. This information is supplied by the previously described input cards and consists of (1) parameter designation assigned to the measurement system, (2) the number of the Typical Hookup to be utilized as a guide for design of the system, (3) the range or the identification number of the transducer to be used for the measurement, (4) Instrument Book item number assigned to the measurement, and (5) the card count number which identifies input cards associated with the measurement and which specifies the processing sequence of that group of cards. It should be noted that, generally, the number of input cards required for a measurement corresponds to the number of independent readouts and/or recording devices desired for that measurement.

3.3 OPTIONAL INPUT INFORMATION

Information not required by the computer program, but in some cases desirable, may also be supplied on the input cards for each measurement system. This information consists of: (1) parameter nomenclature which is descriptive of the measurement, (2) identification number of specific signal routing if such is desired, (3) identification number of specific signal conditioning hardware if preselected, (4) identification number of specific readout and/or recording hardware if preselected, (5) the sketch number which shows the physical location and installation of the transducer in the test cell or area, and (7) a priority code if it is desirable to process the input cards for this measurement prior to those for lower priority measurements. Inclusion of all or any portion of the above information on the input cards is optional.

3.4 DATA REDUCTION INFORMATION

Data reduction cards contain the parameter designation, the identification code for the particular step of the calibration sequence which applies to the assigned readout and/or recorder, and the data reference code. The above codes instruct the computer as to which calibration steps are to be used to reduce the data for a parameter and to the

particular reference point for the calibration. The specified calibration information (obtained from the transducer file or from tables of standard millivolt substitution calibration values built into the computer program) will be printed on the data reduction information listing. This listing is discussed in Section IV.

SECTION IV COMPUTER OUTPUTS

As previously stated, the result of a computer run is a series of listings which describes the instrumentation systems that are to be used. Most of these listings are incorporated in the Instrument Book, and the remaining ones are maintained as equipment inventory and utilization lists. These listings are discussed in the following paragraphs.

4.1 HOOKUP INFORMATION

The hookup information listing is incorporated in the Instrument Book so that instrumentation components can be properly connected to form complete measurement systems. For each measurement, hookup information consists of (1) parameter designation and nomenclature, (2) identification numbers of transducer and all equipment utilized with the measurement and the order in which it is connected, (3) identification number of the Standard Cable Fabrication to be used to connect the transducer to the specified permanent connection point, (4) identification number of the Typical Hookup by which the system was designed, (5) assigned number of the Instrument Book sketch which shows the physical location of the transducer, and (6) the Instrument Book item number assigned to the parameter. Figure 7 is a sample page of a hookup information listing.

4.2 INTERCONNECTION INFORMATION

To connect the permanently installed equipment specified in the hookup listing, specific points on the interconnection devices must be connected. The interconnection information listing specifies the exact interconnections required and the item number of the measurement system with which they are associated. This listing is included in the Instrument Book for use during hookup, checkout, and trouble shooting of the measurement systems.

4.3 CABLE FABRICATION AND INSTALLATION INFORMATION

To facilitate the fabrication and installation of cables used to connect transducers to permanent connection points, a listing of required cable fabrications is produced and included in the Instrument Book. This listing specifies identification number of the Standard Cable Fabrication to be used for each measurement system, the points to which each end of the cable is to be connected, and the first signal conditioner used with the parameter.

4.4 DIGITAL SYSTEM CHANNEL ASSIGNMENTS

To facilitate the setup and checkout of multiple-channel digital recording systems, a channel number ordered listing of the parameters associated with the system is included in the Instrument Book. The designation of the parameter to which a channel is assigned is printed beside the channel number, thus allowing rapid determination of the channels used and all channel assignments.

4.5 DATA REDUCTION INFORMATION

Data reduction information listings are included in the Instrument Book. This information consists of listings for each recorder and the parameter assigned to the recorder or recorder channel. In addition, the calibration step number code and engineering units equivalent value of the calibration step along with the data reference for each parameter are included.

4.6 UPDATED REFERENCE FILES

Listings of the reference files which were used by the computer program are maintained as equipment inventory and utilization lists. The listing of the Typical Hookup file is used for reference as to the information supplied to the computer for the given computer run.

When a transducer or other equipment is selected for use with a measurement during a computer run, the appropriate reference file is updated to show that the selected hardware is assigned to the measuring system. Upon completion of the run, listings of the updated transducer and equipment files are produced. These listings show all the transducer and equipment reference information used and the hardware utilized for each measurement. Listings of the updated files provide an excellent transducer and equipment inventory.

SECTION V

ADDITIONAL COMPUTER PROGRAM CAPABILITIES

In addition to its normal use for design and documentation of electrical instrumentation systems, the computer program is frequently used to design and document pneumatic systems. Special reference files of pneumatic system components and Typical Hookups are supplied to the computer as reference files. The computer processes input cards for pneumatic systems and outputs pneumatic hookup, interconnection, and assignment information in the same manner as for electrical systems.

Another feature of the computer program provides that, on completion of a computer run of an Instrument Book, all information that the computer contains at that time is transferred to a special reel of magnetic tape. By utilizing this tape reel and the special revision capabilities of the program, the Instrument Book can be revised by the computer. In such cases, all information and assignments which are not altered by the specific use of the revision capability will remain exactly as they were at the completion of the previous run.

SECTION VI

PLANNED ADDITIONAL PROGRAM CAPABILITIES

The further development of the program system to allow the computer to specify the setup of multiple or adjustable range equipment utilized with measurement systems is planned in the near future. This capability will include such things as specifying gain settings for variable gain devices and specifying range for selectable range readouts and/or recorders.

In short, although a rather substantial start has been made toward automating much of the routine aspect of Instrumentation Systems Design, continued efforts to expand and improve the system are envisioned.

APPENDIXES
I. ILLUSTRATIONS
II. COMPUTER SYSTEM PROGRAM

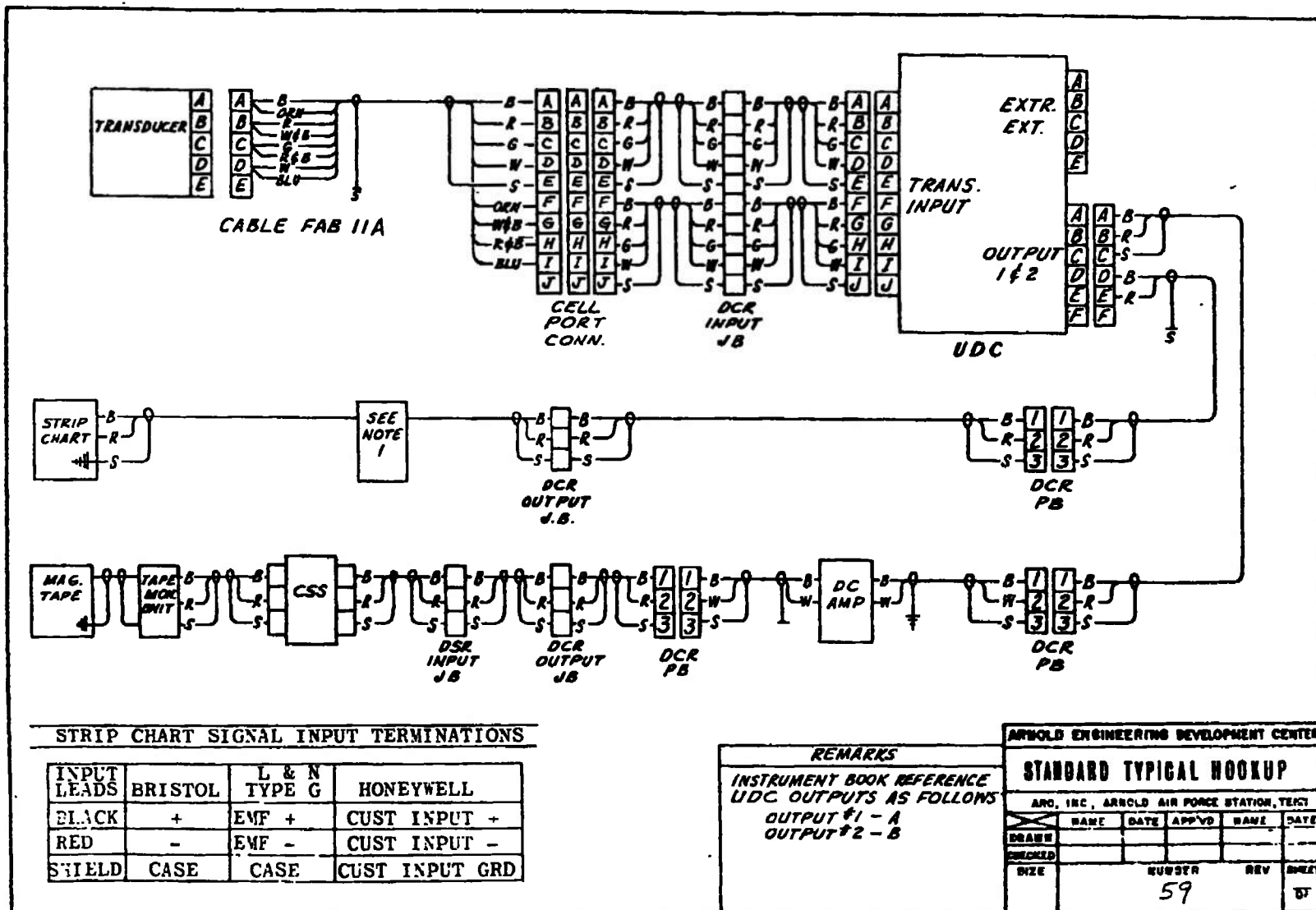
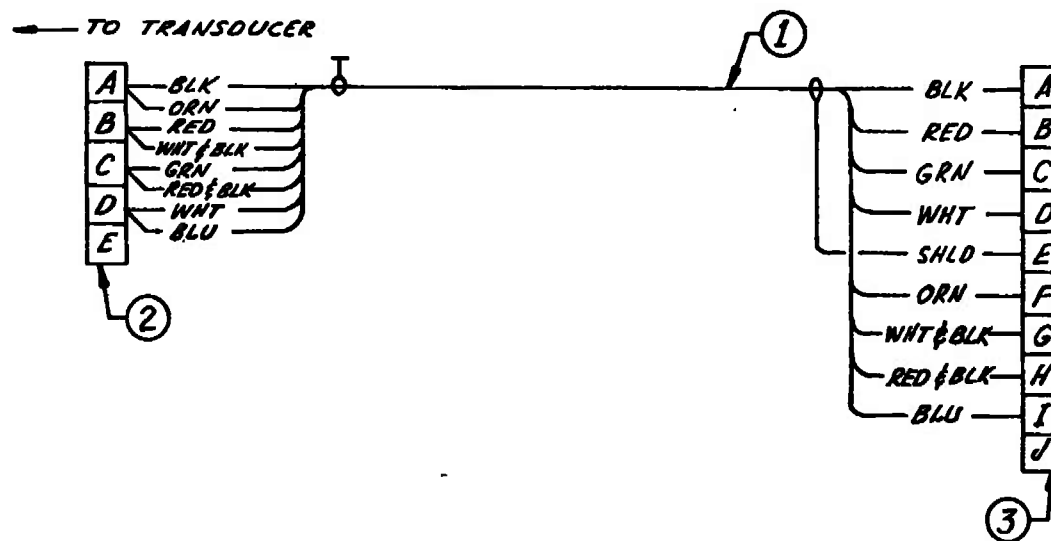


Fig. 1 Typical Hookup



						ARNOLD ENGINEERING DEVELOPMENT CENTER					
						STANDARD CABLE FAB					
						ARO, INC., ARNOLO AIR FORCE STATION, TENN					
						<input checked="" type="checkbox"/>	NAME	DATE	APP'VD	NAME	DATE
						DRAWN			W/MS	CC	5/1/5
						CHECKED					
						SIZE	NUMBER		REV	SHEET	
							11		A	1 OF 1	
1	CONNECTOR, CA06RX-185-1P		5935-NL999507-5	3							
1	CONNECTOR, CA06RX-145-5S		5935-NL999507-2	2							
AS REQD.	CABLE, 3 COND. W/SHLD. TEFLON		6145-NL559400-278	1							
Quantity/ Cable	Material Description	Part No.	Stock No.	Item							

Fig. 2 Standard Cable Fabrication

TYP NO.	C C	TRANSDUCER TYPE	I C	CABLE TYPE	SIGNAL ROUTING	WIRED S.G.	P.B. D I	SIG. COND	P.B. D I	P.B. D I	SIG. COND	P.B. D I	REC. ELEC	CAB FAB
35	2	DUCER-5			AREA DCR I	UC4A	X					X	OCR D	SC 11A
35	1					UC4B	X					X	OCR O	MS
36	2	DUCER-5		PORT		UC1A	X					X	OCR O	SC 11A
36	1					UC1B	X					X	OCR O	MS
37	1	DUCER-5	X	PORT	THRUST CAL LOGIC SHOWN	UC1A	X					X		0003 83
38	1	DUCER-5	X	PORT	THRUST CAL LOGIC SHOWN	UC1A	X					X		DD03 83
39C	1	DUCER-5			ARER OCR I	UC4A	X					X	OCR O	MS 50A
40A	1	DUCER-5		PORT	OCR I	UC1A	X					X	OCR O	0002 83
41C	2	DUCER-5		PORT	OCR I	UC1A	X					X		0002 83
41C	1					UC1B	X					X	OCR O	SR01
42C	1	DUCER-5				UC1A	X					X	OCR O	0003 3
43C	3	DUCER-5		PORT		UC1A	X					X		0003 83
43C	2					UC1B	S2					X		SR01
43C	1							X	MD01	X		X		ME04
44C	4	DUCER-5		PORT		UC1A	X X		FL01	X		X		0003 83
44C	3					UC1B	S2X		DA5A					LG01
44C	2								DA5B	X		X		ME09
44C	1							X	DA5A	X		X		SR01
45C	2	DUCER-5		PORT		UC1A	X					X		SR01 11A
45C	1					UC1B	X					X		0003
47	2	DUCER-5				UC1A	X					X		DD02 83
47	1					UC1B	X X		MD01	X		X		ME04
48A	2	DUCER-5			OUTSIDE CELL CONN-OCR I	UC2A	X X		MD01	X		X	OCR O	ME 54C
48A	1					UC2B	X					X	OCR O	0002
49	2	DUCER-5		PORT		UC1A	X					X	OCR O	MS 11A
49	1					UC1B	X X		MD	X		X	OCR O	ME
50C	1	DUCER-5		PORT		UC1A	X X		DA	X		X	OCR O	ME 11A
510	3	DUCER-5		PORT		UC1A	X					X	OCR O	MS 11A
510	2					UC1B	S2X		DA	X		X	OCR O	ME
510	1											X	OCR O	SC
52C	1	DUCER-5	X	PORT		UC1A	X X		MD01	X		X		ME04 11A
53A	2	DUCER-5			AREA-OCR I	UC4A	X					X		DD02 82
53A	1					UC4B	X X		MD01	X		X	OCR O	ME04
54A	1	DUCER-5			AREA-OCR I	UC4A	X					X	OCR O	DD02 82
55	2	DUCER-5				UC4A	X					X		OS 12A
55	1					UC4B	X					X		SC
56A	2	DUCER-5				UC4A	X					X		MS 12A
56A	1					UC4B	X X		VI	X		X		CO
57C	3	DUCER-5		PORT		UC1A	S2X		VI	X		X		MT02 11A
57C	2								VI	X		X		MT02
57C	1					UC1B	X X		OA	X		X		QS23
58A	3	DUCER-5		PORT		UC1A	X X		VI	X		X	OCR O	MT02 11A
58A	2					UC1B	S2X		DA	X		X	OCR O	OS
58A	1								DA	X		X	OCR O	SC
59	2	DUCER-5		PORT		UC1A	X X		DA	X		X	OCR O	MT01 11A
59	1					UC1B	X					X	OCR O	SC
60C	2	DUCER-5		PORT	OCR I	UC1A	X X		VI	S2		X	OCR O	MT02 11A
60C	1											X	OCR O	CO01
61	1	DUCER-5		PORT	OCR I	UC1A	X X		MD01	X		X	OCR O	FA01 11A
62	2	DUCER-5		PORT		UC1A	X X		VI	X		X	OCR O	MT02 11A

Fig. 3 Portion of Typical Hookup Reference File

B-FILE											
CARD	C	IDEN.	DESCRIPTION	TYPE CODE	DEVICE	FROM	DEVICE	PT	TO	USED FOR	TEST CELL
21	2	U021A	UDC OUTPUT A	UC5A	JB 23	21	PB1		R69	PTCV-1	M
21	1	U021B	UDC OUTPUT B	UC5B	JB 23	21	PB2		R91	PTCV-1	M
22	2	U022A	UDC OUTPUT A	UC5A	JB 23	22	PB1		R70		M
22	1	U022B	UDC OUTPUT B	UC5B	JB 23	22	PB2		R92		M
120	2	U430A	UDC OUTPUT A	UC1A	PORT 4	430	PB1		L78	PFV-1A	M
120	1	U430B	UDC OUTPUT B	UC1B	PORT 4	430	PB2		L34	PFV-1A	M
121	2	U431A	UDC OUTPUT A	UC1A	PORT 4	431	PB1		M69	PDJH	M
121	1	U431B	UDC OUTPUT B	UC1B	PORT 4	431	PB2		M25	PDJH	M
186	1	RJ316	T/C PORT - RJ3 CHAN 16	RJ02	JB 1229	116	PB1		B56	IOV-A	M
187	1	RJ317	T/C PORT - RJ3 CHAN 17	RJ02	JB 1229	117	PB1		B57		M
1082	1	A0908	DC AMPLIFIER	DA01	PB1	J32	PB1		J86		M
1083	1	A0909	DC AMPLIFIER	DA01	PB1	J33	PB1		J87	PFV-1A	M
1084	1	A0910	DC AMPLIFIER	DA01	PB1	J34	PB1		J88	PDJH	M
1433	1	MTD01	MAG TAPE D CHAN 1 - FM	MT01	PB2	M72	CABLE3175		MT-D-01		M
1434	1	MTD02	MAG TAPE D CHAN 2 - FM	MT01	PB2	M73	CABLE3176		MT-D-02	PFV-1A	M
1730	1	MC030	MICROSADIC AMP 30 - 5MV	MS01	PB2	B83	CABLE3557		MC-030	IOV-A	M
1731	1	MC031	MICROSADIC AMP 31 - 5MV	MS01	PB2	B84	CABLE3558		MC-031		M
2231	1	M0102	METER 102	ME01	PB1	G80	CABLE3264		MTR-102	PDJH	M
2364	1	SC117	STRIP CHART 117	SC01	PB2	F56	CABLE3342		SC-117	PFV-1A	M
2365	1	SC118	STRIP CHART 118	SC01	PB2	F57	CABLE3343		SC-118		M
2366	1	SC119	STRIP CHART 119	SC01	PB2	F58	CABLE3344		SC-119	PTCV-1	M
3000	1		PB INTERCONNECT PB1-PB2	INTR	PB1	J15	PB2		E69	PFV-1A	M
3001	1		PB INTERCONNECT PB1-PB2	INTR	PB1	J16	PB2		E70	IOV-A	M
3002	1		PB INTERCONNECT PB1-PB2	INTR	PB1	J17	PB2		E71	PTCV-1	M
3003	1		PB INTERCONNECT PB1-PB2	INTR	PB1	J18	PB2		E72		M
3004	1		PB INTERCONNECT PB1-PB2	INTR	PB1	J19	PB2		E73		M
3005	1		PB INTERCONNECT PB1-PB2	INTR	PB1	J20	PB2		E74		M
3006	1		PB INTERCONNECT PB1-PB2	INTR	PB1	J21	PB2		S70		M
3007	1		PB INTERCONNECT PB1-PB2	INTR	PB1	J22	PB2		S71		M
3008	1		PB INTERCONNECT PB1-PB2	INTR	PB1	J23	PB2		S72		M

Fig. 4 Portion of Equipment Reference File

C-FILE												
T-DUCER TYPE	RANGE	UNITS	B C	USED FOR PARAMETER	TRAN MFG.	I-NO	B C	UDC CARD	R N	POS. RN EQUIV.	NEG. RN EQUIV.	RE-CAL DATE
DUCER-5	150Q	PSA		PDJH	TABER	26928			0			PSA
						26928			1			PSA
						26928			2			PSA
						26928			3			PSA
						26928			4			PSA
DUCER-5	500	PSA		PFV-1A	TABER	27133		DS	0	N/A		PSA 011170
						27133			1	0120.102		PSA
						27133			2	0239.530		PSA
						27133			3	0358.474		PSA
						27133			4	0477.182		PSA
DUCER-5	5000	PSG		PTCV-1	TABER	28349		DS	0	N/A		PSG 032370
						28349			1	1354.884		PSG
						28349			2	2712.516		PSG
						28349			3	4069.841		PSG
						28349			4	N/A		PSG

Fig. 5 Portion of Transducer Reference File.

INPUT CARD										OPTIONAL										OPTIONAL									
PARAMETER	COUNT	NOMENCLATURE	TYP NO	TRANSDUCER MFG	RANGE OR I NO	HARD- WIRE SIG COND	SIG COND	SIG COND	HEAD- OUT	UNIT	ITEM NO																		
PFV-1A	1	2 FUEL TCV PRESSURE	59		1271133	U430AA09107					181																		
PFV-1A	1					U430B																							
POJH	1	10X INJECTOR PRESS. SOC TAPER			R1500	PSA					132																		
TOV-A	1	1 TCV 2X TEMPERATURE	324C			R102				MS01	213																		
PTCV-1	1	1 TCV INT. PRESSURE	6C		R5000	FS6					9.4																		

Notes:

1. For parameter PFV-1A, all equipment has been preselected and specified by identification number on the input cards.
2. For parameter POJH, only the required information plus the name of a particular transducer manufacturer is included on the input card.
3. For parameter TOV-A, the required information and the type codes of the desired hardwired signal conditioner and readout are specified on the input card.
4. For parameter PTCV-1, only the required information is on the input card.

DATA REDUCTION CARD (SEPARATE DECK OF CARDS DO NOT MIX WITH INPUT CARDS)																						
PARAMETER	COUNT	NOMENCLATURE	TYP NO	TRANSDUCER MFG	RANGE OR I NO	HARD- WIRE SIG COND	SIG COND	SIG COND	HEAD- OUT	UNIT	ITEM NO											
PFV-1A	1R																					
POJH	2R																					
TOV-A																						
PTCV-1	2R																					

Fig. 6 Input and Data Reduction Cards

HOOKUP INFORMATION

PARAMETER	C	NOMENCLATURE	TRAN I-NO.	CONNECTING DEVICE	POINT	WIRED S.C.	UDC CARD	SIG. COND.	SIG. COND.	READOUT	TYP NO.	CAB FAB	LOC SK.	ITEM NO	C
PFV-1A	2	FUEL TCV PRESS.	27133	PORT 4	430	U430A	DS	A0909		MTD02	59	11A	18	1	2
PFV-1A	1			PORT 4	430	U430B				SC117				1	1
POJH	1	DX INJECTOR PRESS.	26928	PORT 4	431	U431A		AD910		M0102	50C	11A	13	2	1
TOV-A	1	TCV DX TEMP.	TC/CA	JB 1229	116	RJ316				MC030	324C	29A	21	3	1
PTCV-1	1	TCV NIT. PRESS.	28349	JB 23	21	U021A	DS			SC119	6C	12A	9	4	1

Fig. 7 Hookup Information

APPENDIX II

COMPUTER SYSTEM PROGRAM

For those desiring detailed information about the program system, the computer system program flow charts and program listings are presented. Figure II-1 is the program flow chart for the programs which produce the various Instrument Book listings, and Fig. II-2 is the program flow chart for the programs which revise a previous computer run. The remainder of this Appendix consists of listings of the actual programs. These programs are written in "COBOL F" language and are used with an IBM-360-Model 50 computer.

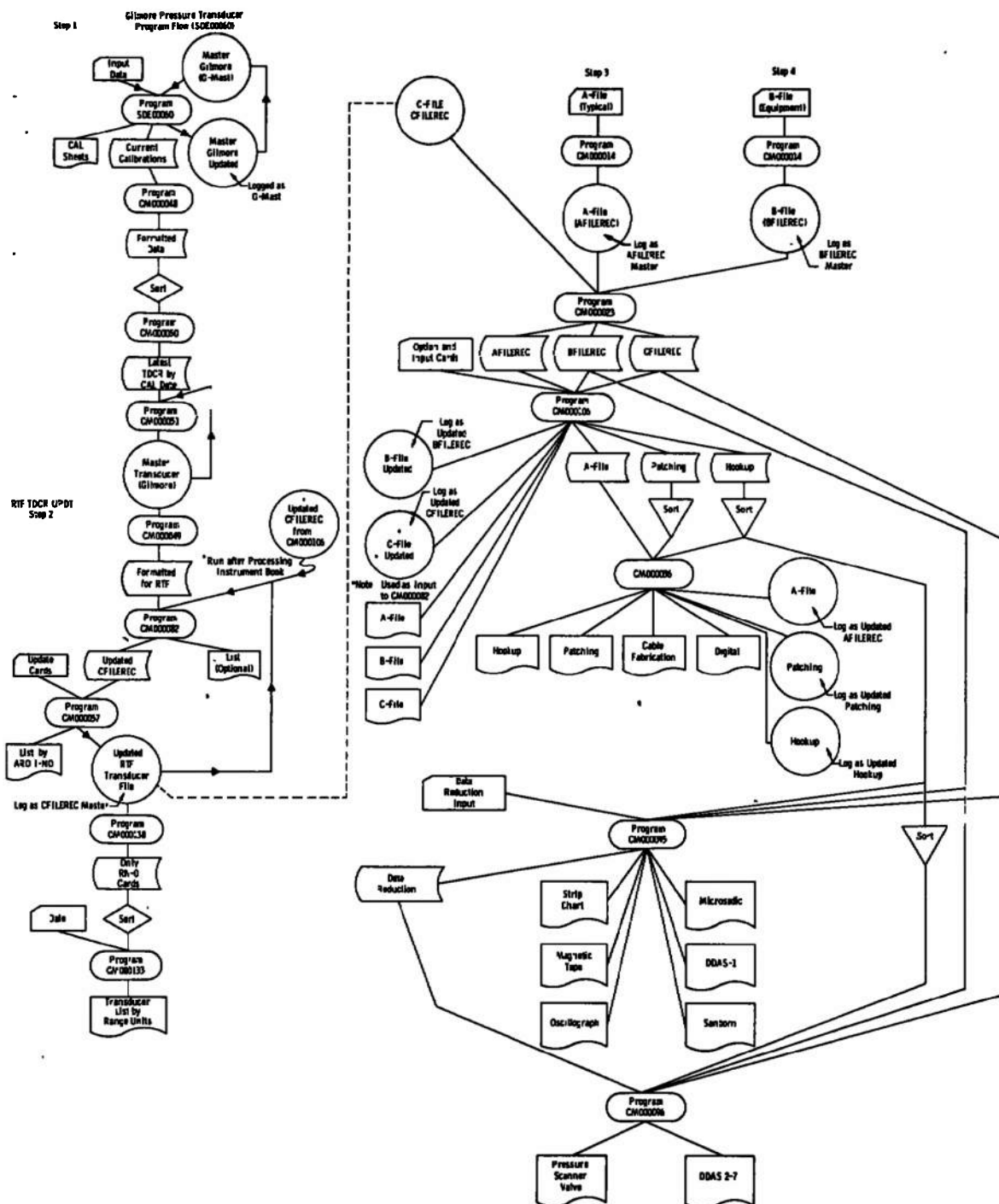


Fig. II-1 ETF Instrument Book

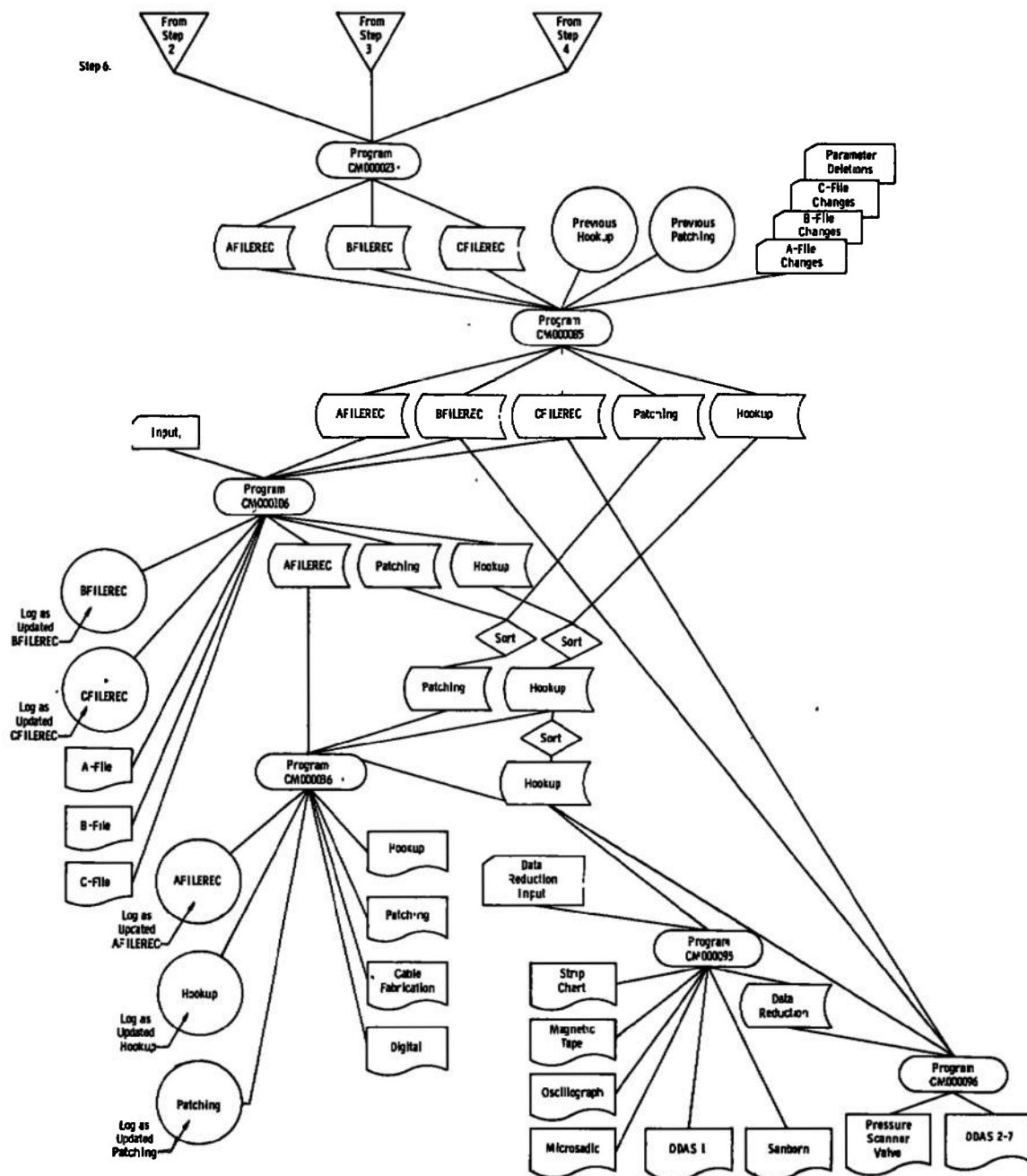


Fig. II-2 ETF Instrument Book Revision Option

1

00001	00101	IDENTIFICATION DIVISION.	CM000014
00002	00102	PROGRAM-IO. 'CM000014'.	CM000014
00003	00104	ENVIRONMENT DIVISION.	CM000014
00004	00105	CONFIGURATION SECTION.	CM000014
00005	00106	SOURCE-COMPUTER. IBM-360 M50.	CM000014
00006	00107	OBJECT-COMPUTER. IBM-360 M50.	CM000014
00007	00108	INPUT-OUTPUT SECTION.	CM000014
00008	** 109	FILE-CONTROL.	
00009	00110	SELECT CARD-IN ASSIGN 'ALLCAROS' UTILITY.	CM000014
00010	00112	SELECT B-FILE ASSIGN 'BFILERECD' UTILITY.	CM000014
00011	00201	DATA DIVISION.	CM000014
00012	00202	FILE SECTION.	CM000014
00013	00203	FD CARD-IN	RECORD CONTAINS 80 CHARACTERS
00014	00204		LABEL RECORDS ARE STANDARD
00015	00205		RECORDING MODE IS F
00016	00206		BLOCK CONTAINS 10 RECORDS
00017	00207		DATA RECORD IS REC-IN.
00018	00208	01 REC-IN.	CM000014
00019	** 302	02 FILLER PICTURE X(4).	
00020	303	02 FILLER PICTURE 9.	
00021	** 304	02 FILLER PICTURE X(75).	
00022	00221	FD B-FILE	RECORD CONTAINS 80 CHARACTERS
00023	00222		LABEL RECORDS ARE STANDARD
00024	00223		RECORDING MODE IS F
00025	00224		BLOCK CONTAINS 1 RECORDS
00026	00225		DATA RECORD IS B-REC.
00027	00301	01 B-REC.	CM000014
00028	** 209	02 FILLER PICTURE X(4).	
00029	2092	02 FILLER PICTURE 9.	
00030	** 2092	02 FILLER PICTURE X(75).	
00031	00322	WORKING-STORAGE SECTION.	CM000014
00032	00323	77 A-CNT PICTURE 5999 COMPUTATIONAL-3 VALUE ZERO.	CM000014
00033	00403	PROCEDURE DIVISION.	CM000014
00034	00409	START.	CM000014
00035	** 412	OPEN INPUT CARD-IN. OPEN OUTPUT B-FILE.	
00036	** 411	CD-READ. READ CARD-IN AT END GO TO ENDIT.	
00037	412	WRITE B-REC FROM REC-IN. GO TO CD-READ.	
00038	413	ENDIT. CLOSE CARD-IN. CLOSE B-FILE.	
00039	414	STOP RUN.	

1

00001	001010	IDENTIFICATION DIVISION.	CM000095
00002	001020	PROGRAM-10. 'CM000145'.	
00003	001030	AUTHOR. ROSE.	CM000095
00004	001040	ENVIRONMENT DIVISION.	CM000095
00005	001050	CONFIGURATION SECTION.	CM000095
00006	001060	SOURCE-COMPUTER. IBM-360 H50.	CM000095
00007	001070	OBJECT-COMPUTER. IBM-360 H50.	CM000095
00008	001080	INPUT-OUTPUT SECTION.	CM000095
00009	001090	FILE-CONTROL.	CM000095
00010	001110	SELECT HOOK ASSIGN 'HOOK' UTILITY.	CM000095
00011	001140	SELECT LIST ASSIGN 'LIST' UTILITY.	CM000095
00012	001170	DATA DIVISION.	CM000095
00013	001180	FILE SECTION.	CM000095
00014	002150	FD LIST RECORDING F BLOCK 12 RECORDS RECORD 132	
00015	002160	LABEL RECORDS OMITTED DATA RECORD LIT.	CM000095
00016	002170	01 LIT PICTURE X(132).	CM000095
00017	004010	FD HOOK RECORDING F BLOCK 1 RECORDS RECORD 133	CM000095
00018	004020	LABEL RECORDS STANDARD DATA RECORD HOK.	CM000095
00019	004030	01 HOK.	CM000095
00020	004040	02 FILLER PICTURE X.	CM000095
00021	004050	02 HPAR PICTURE X(9).	CM000095
00022	004060	02 FILLER PICTURE X(58).	CM000095
00023	004070	02 HUOC PICTURE X(5).	CM000095
00024	004080	02 FILLER PICTURE X(25).	CM000095
00025	004090	02 HROOUT PICTURE X(5).	CM000095
00026	004100	02 RHRDOUT REDEFINES HROOUT.	CM000095
00027	004110	03 HR1 PICTURE X.	CM000095
00028	004120	03 HR2 PICTURE X.	CM000095
00029	004130	03 HR3 PICTURE X.	CM000095
00030	004131	03 HHR3 REDEFINES HR3 PICTURE 9.	
00031	004140	03 HR45 PICTURE XX.	CM000095
00032	004141	03 RHR45 REDEFINES HR45 PICTURE 99.	CM000095
00033	004150	02 RRHROOUT REDEFINES RHRROOUT.	CM000095
00034	004160	03 HR12 PICTURE XX.	CM000095
00035	004170	03 HR345 PICTURE XXX.	CM000095
00036	004180	03 R345 REDEFINES HR345 PICTURE 999.	CM000095
00037	004181	02 HROT REDEFINES HROOUT.	CM000095
00038	004182	03 HRDT1 PICTURE X.	CM000095
00039	004183	03 HRO23 PICTURE 99.	CM000095
00040	004184	03 HRD45 PICTURE XX.	CM000095
00041	004210	02 FILLER PICTURE X(20).	CM000095
00042	004220	02 HITEM PICTURE XXXX.	CM000095
00043	004230	02 FILLER PICTURE X(6).	CM000095
00044	023010	WORKING-STORAGE SECTION.	CM000095
00045	023020	77 J PICTURE 999.	CM000095
00046	023030	77 K PICTURE 999.	CM000095
00047	023100	77 JECT PICTURE 99 VALUE 50.	CM000095
00048	*011010	01 SVTABLE.	CM000095
00049	011020	02 SVTABL OCCURS 60.	CM000095
00050	011050	03 SV3 PICTURE X(9) OCCURS 12.	CM000095
00051		01 SVTDP3	
00052		02 FILLER PICTURE X VALUE SPACE.	
00053		02 FILLER PICTURE X(25) VALUE 'NO RANGE PORT 01 PORT 0'.	
00054		02 FILLER PICTURE X(25) VALUE '2' PORT 03 PORT 04 P'.	

2

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00055 02 FILLER PICTURE X(25) VALUE 'ORT 05 PORT 06 PORT 0'.
00056 02 FILLER PICTURE X(25) VALUE '7 PORT 08 PORT 09 P'.
00057 02 FILLER PICTURE X(26) VALUE 'ORT 10 PORT 11 PORT 12'.
00058 02 FILLER PICTURE X(5) VALUE SPACE.
00059 01 SVTOP1.
00060 02 FILLER PICTURE X(36) VALUE SPACE.
00061 02 FILLER PICTURE X(25) VALUE 'SCANNER VALVE ASSIGNMENTS'.
00062 02 FILLER PICTURE X(33) VALUE SPACE.
00063 02 FILLER PICTURE X(11) VALUE 'SHEET OF'.
00064 02 FILLER PICTURE X(27) VALUE SPACE.
00065 01 SVTOP2.
00066 02 FILLER PICTURE X VALUE SPACE.
00067 02 FILLER PICTURE X(12) VALUE 'SV DUCER'.
00068 02 FILLER PICTURE X(119) VALUE SPACE.
00069 01 SVLINE.
00070 02 FILLER PICTURE X VALUE SPACE.
00071 02 SVNO PICTURE 99.
00072 02 FILLER PICTURE X(17) VALUE 'VAC REF'.
00073 02 PORT2 PICTURE X(10).
00074 02 PORT3 PICTURE X(10).
00075 02 PORT4 PICTURE X(10).
00076 02 PORT5 PICTURE X(10).
00077 02 PORT6 PICTURE X(10).
00078 02 PORT7 PICTURE X(10).
00079 02 PORT8 PICTURE X(10).
00080 02 PORT9 PICTURE X(10).
00081 02 PORT10 PICTURE X(10).
00082 02 PORT11 PICTURE X(10).
00083 02 PORT12 PICTURE X(10).
00084 02 FILLER PICTURE XX VALUE SPACE.
00085 030010 PROCEDURE DIVISION. CM000095
00086 030021 OPEN OUTPUT LIST.
00087 030100 OPEN INPUT HOOK. CM000095
00088 030130 PERFORM SPACE-T8. CM000095
00089 031010 RD-HK. CM000095
00090 031020 READ HOOK AT ENO GO TO HK-END. CM000095
00091 031070 IF HR1 = 'S' AND HR2 = '0' OR '1' OR '2' OR '3' OR '4' OR CM000095
00092 031080 '5' OR '6' OR '7' OR '8' OR '9' GO TO SV-ROUTE. CM000095
00093 031110 GO TO RD-HK. CM000095
00094 049010 SV-ROUTE. CM000095
00095 049020 IF HRO23 > 60 DISPLAY '4902' HRDOUT GO TO RD-HK. CM000095
00096 049030 MOVE HRD23 TO J. CM000095
00097 049040 IF RHR45 > 12 DISPLAY '4904' HRDOUT GO TO RD-HK. CM000095
00098 MOVE RHR45 TO K.
00099 049050 MOVE HPAR TO SV3 (J, K) CM000095
00100 049060 GO TO RD-HK. CM000095
00101 062010 HK-END. CM000095
00102 062020 CLOSE HOOK. CM000095
00103 069070 GO TO WR-SR. CM000095
00104 073010 SPACE-T8. CM000095
00105 073090 PERFORM SPC-SV VARYING K FROM 1 BY 1 UNTIL K > 12 AFTER CM000095
00106 073100 J FROM 1 BY 1 UNTIL J > 60. CM000095
00107 074180 SPC-SV. CM000095
00108 074190 MOVE SPACE TO SV3 (J, K). CM000095
00109 **071010 WR-SR. CM000095
00110 **067240 MOVE 24 TO JECT. CM000095
00111 068010 WR-SV. CM000095

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3

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00112      PERFORM WRSV1 VARYING J FROM 1 BY 1 UNTIL J > 60.
00113 **066240      GO TO WR-ALL.                                CM000095
00114      068060 WRSV1.                                          CM000095
00115      IF J = 1 PERFORM SVTOP.
00116      IF J = 21 PERFORM SVTOP.
00117      IF J = 41 PERFORM SVTOP.
00118      MOVE J TO SVNO.
00119      MOVE SV3 (J, 2) TO PORT2.
00120      MOVE SV3 (J, 3) TO PORT3.
00121      MOVE SV3 (J, 4) TO PORT4.
00122      MOVE SV3 (J, 5) TO PORT5.
00123      MOVE SV3 (J, 6) TO PORT6.
00124      MOVE SV3 (J, 7) TO PORT7.
00125      MOVE SV3 (J, 8) TO PORT8.
00126      MOVE SV3 (J, 9) TO PORT9.
00127      MOVE SV3 (J, 10) TO PORT10.
00128      MOVE SV3 (J, 11) TO PORT11.
00129      MOVE SV3 (J, 12) TO PORT12.
00130      WRITE LIT FROM SVLINE AFTER 2.
00131      SVTOP.
00132      WRITE LIT FROM SVTOP1 AFTER 0.
00133      WRITE LIT FROM SVTOP2 AFTER 3.
00134      WRITE LIT FROM SVTOP3 AFTER 1.
00135 **067230 WR-ALL.                                CM000095
00136      072040      CLOSE LIST.                                CM000095
00137      072060      STOP RUN.                                CM000095

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1 ---

00001	001010	IDENTIFICATION DIVISION.	CM000095
00002	001020	PRDGRAM-10. 'CM000095'.	CM000095
00003	001030	AUTHOR. ROSE.	CM000095
00004	001040	ENVIRONMENT DIVISION.	CM000095
00005	001050	CONFIGURATION SECTION.	CM000095
00006	001060	SOURCE-COMPUTER. IBM-360 H50.	CM000095
00007	001070	OBJECT-COMPUTER. IBM-360 H50.	CM000095
00008	001080	INPUT-OUTPUT SECTION.	CM000095
00009	001090	FILE-CONTROL.	CM000095
00010	001100	SELECT. BFILE ASSIGN. 'BFILE' UTILITY.	CM000095
00011	001110	SELECT HOOK ASSIGN. 'HOOK' UTILITY.	CM000095
00012	001120	SELECT CFILE ASSIGN. 'CFILE' UTILITY.	CM000095
00013	001130	SELECT CARD ASSIGN. 'CARD' UTILITY.	CM000095
00014	001140	SELECT LIST ASSIGN. 'LIST' UTILITY.	CM000095
00015	001150	SELECT DCARD ASSIGN. 'DCARD' UTILITY.	CM000095
00016	001170	DATA DIVISION.	CM000095
00017	001180	FILE SECTION.	CM000095
00018	002010	FD BFILE RECORD CONTAINS 80 CHARACTERS	CM000095
00019	002020	LABEL RECORDS ARE STANDARD	CM000095
00020	002030	RECORDING MODE IS F	CM000095
00021	002040	BLOCK CONTAINS 45 RECORDS	CM000095
00022	002050	DATA RECORD IS BFILE.	CM000095
00023	002060	01 BFILE.	CM000095
00024	002070	02 B1 PICTURE X(5).	CM000095
00025	002080	02 B3.	CM000095
00026	002090	03 B3A PICTURE XX.	CM000095
00027	002100	03 B3B PICTURE XXX.	CM000095
00028	002110	02 B4 PICTURE X(24).	CM000095
00029	002130	02 B5 PICTURE X(4).	CM000095
00030	002140	02 FILLER PICTURE X(42).	CM000095
00031	002150	FD LIST RECORDING F BLOCK 12 RECORDS RECORD 132	CM000095
00032	002160	LABEL RECORDS OMITTED DATA RECORD LIT.	CM000095
00033	002170	01 LIT PICTURE X(132).	CM000095
00034	003010	FD CFILE RECORD CONTAINS 80 CHARACTERS	CM000095
00035	003020	LABEL RECORDS ARE STANDARD	CM000095
00036	003030	RECORDING MODE IS F	CM000095
00037	003040	BLOCK CONTAINS 45 RECORDS	CM000095
00038	003050	DATA RECORD IS CFIL.	CM000095
00039	003060	01 CFIL.	CM000095
00040	003070	02 C1 PICTURE X(4).	CM000095
00041	003080	02 C2 PICTURE 9.	CM000095
00042	003090	02 C3 PICTURE X(7).	CM000095
00043	003100	02 C4 PICTURE X(11).	CM000095
00044	003110	02 C5 PICTURE X(9).	CM000095
00045	003120	02 C6 PICTURE X(9).	CM000095
00046	003130	02 C7 PICTURE X(7).	CM000095
00047	003140	02 C8 PICTURE X(4).	CM000095
00048	003150	02 C9 PICTURE X.	CM000095
00049	003160	02 C10 PICTURE X(9).	CM000095
00050	003170	02 C11 PICTURE X(9).	CM000095
00051	003180	02 C11B PICTURE XXX.	CM000095
00052	003190	02 C12 PICTURE X(6).	CM000095
00053	004010	FD HOOK RECORDING F BLOCK 1 RECORDS RECORD 133	CM000095
00054	004020	LABEL RECORDS STANDARD DATA RECORD HDK.	CM000095

2

00055	004030	01	HOK.			CM000095
00056	004040	02	FILLER	PICTURE	X.	CM000095
00057	004050	02	MPAR	PICTURE	X(9).	CM000095
00058	004060	02	FILLER	PICTURE	X(58).	CM000095
00059	004070	02	HUWC	PICTURE	X(5).	CM000095
00060	004080	02	FILLER	PICTURE	X(25).	CM000095
00061	004090	02	HROOUT	PICTURE	X(5).	CM000095
00062	004100	02	RHRDOUT	REDEFINES	HROOUT.	CM000095
00063	004110	03	HR1	PICTURE	X.	CM000095
00064	004120	03	HR2	PICTURE	X.	CM000095
00065	004130	03	HR3	PICTURE	X.	CM000095
00066	004131	03	HHR3	REDEFINES	HR3 PICTURE 9.	CM000095
00067	004140	03	HR45	PICTURE	XX.	CM000095
00068	004141	03	RHR45	REDEFINES	HR45 PICTURE 99.	CM000095
00069	004150	02	RHRDOUT	REDEFINES	RHRDOUT.	CM000095
00070	004160	03	HR12	PICTURE	XX.	CM000095
00071	004170	03	HR345	PICTURE	XXX.	CM000095
00072	004180	03	R345	REDEFINES	HR345 PICTURE 999.	CM000095
00073	004181	02	HRDT	REDEFINES	HROOUT.	CM000095
00074	004182	03	HROT1	PICTURE	X.	CM000095
00075	004183	03	HRD23	PICTURE	99.	CM000095
00076	004184	03	HRO45	PICTURE	XX.	CM000095
00077	004210	02	FILLER	PICTURE	X(20).	CM000095
00078	004220	02	HITEM	PICTURE	XXXX.	CM000095
00079	004230	02	FILLER	PICTURE	X(6).	CM000095
00080	005010	FD	CARD	RECORDING F	BLOCK 10 RECORDS RECORD 80	CM00009
00081	005020			LABEL RECORDS OMITTED	DATA RECORD CAR.	CM000095
00082	005030	01	CAR.			CM000095
00083	005040	02	FILLER	PICTURE	X(80).	CM000095
00084	005060	FD	OCARD	RECORDING F	BLOCK 1 RECORDS RECORD 41	CM000095
00085	005070			LABEL RECORDS STANDARD	DATA RECORD OCAR.	CM000095
00086	005080	01	OCAR.			CM000095
00087	005090	02	OR1	PICTURE	X(9).	CM000095
00088	005100	02	FILLER	PICTURE	X.	CM000095
00089	005110	02	DR2	PICTURE	XX.	CM000095
00090	005111	02	ROR	REDEFINES	OR2.	CM000095
00091	005112	03	ROR1	PICTURE	X.	CM000095
00092	005113	03	ROR2	PICTURE	X.	CM000095
00093	005120	02	FILLER	PICTURE	X.	CM000095
00094	005130	02	OR3	PICTURE	XX.	CM000095
00095	005131	02	ROR3	REDEFINES	OR3.	CM000095
00096	005132	03	DR3A	PICTURE	X.	CM000095
00097	005133	03	DR3B	PICTURE	X.	CM000095
00098	005140	02	FILLER	PICTURE	X.	CM000095
00099	005150	02	DR4	PICTURE	XX.	CM000095
00100	005151	02	ROR4	REDEFINES	OR4.	CM000095
00101	005152	03	OR4A	PICTURE	X.	CM000095
00102	005153	03	DR4B	PICTURE	X.	CM000095
00103	005160	02	FILLER	PICTURE	X.	CM000095
00104	005170	02	OR5	PICTURE	XX.	CM000095
00105	005171	02	ROR5	REDEFINES	DR5.	CM000095
00106	005172	03	DR5A	PICTURE	X.	CM000095
00107	005173	03	DR5B	PICTURE	X.	CM000095
00108	005180	02	FILLER	PICTURE	X.	CM000095
00109	005190	02	DR7	PICTURE	XXX.	CM000095
00110	005191	02	ROR7	REDEFINES	DR7.	CM000095
00111	005192	03	DR7A	PICTURE	X.	CM000095

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00112	005193	03	RDR7B	PICTURE 99.	CM000095
00113	005194	02	RRDR7 REDEFINES DR7.		CM000095
00114	005195	03	RR7A	PICTURE X.	CM000095
00115	005196	03	RR7B	PICTURE X.	CM000095
00116	005197	03	RR7C	PICTURE X.	CM000095
00117	005200	02	FILLER	PICTURE X.	CM000095
00118	005210	02	DR8	PICTURE XXX.	CM000095
00119	005211	02	RDR8	REDEFINES DR8.	CM000095
00120	005212	03	RDR8A	PICTURE X.	CM000095
00121	005213	03	RDR8B	PICTURE XX.	CM000095
00122	005220	02	FILLER	PICTURE X(10).	CM000095
00123	005230	02	DR6	PICTURE XX.	CM000095
00124	023010		WORKING-STORAGE SECTION.		CM000095
00125	023020	77	J	PICTURE 999.	CM000095
00126	023030	77	K	PICTURE 999.	CM000095
00127	023040	77	SW1	PICTURE 9 VALUE 0.	CM000095
00128	023050	77	MSW1	PICTURE 9 VALUE 0.	CM000095
00129	023060	77	MSW2	PICTURE 9 VALUE 0.	CM000095
00130	023070	77	MSW3	PICTURE 9 VALUE 0.	CM000095
00131	023080	77	NEG-SW	PICTURE 9 VALUE 0.	CM000095
00132	023090	77	JJ	PICTURE 999 VALUE 0.	CM000095
00133	023100	77	JECT	PICTURE 99 VALUE 50.	CM000095
00134	023110	77	KK	PICTURE 999 VALUE 0.	CM000095
00135		77	JKT	PICTURE X VALUE SPACE.	
00136		77	N	PICTURE 999 VALUE 1.	
00137	**007010	01	SCTABL.		CM000095
00138	007020	02	SCAT	OCCURS 50.	CM000095
00139	007030	03	SC1	PICTURE XXX.	CM000095
00140	007040	03	SC2	PICTURE X(9).	CM000095
00141	007050	03	SC3	PICTURE XXX.	CM000095
00142	007060	03	SC4	PICTURE X(9).	CM000095
00143	007070	03	SC5	PICTURE X(9).	CM000095
00144	007080	03	SC6	PICTURE X(9).	CM000095
00145	007090	03	SC7	PICTURE X(9).	CM000095
00146	007100	03	SC8	PICTURE X(9).	CM000095
00147	007110	03	SC9	PICTURE X(10).	CM000095
00148	007120	03	SC10	PICTURE X(14).	CM000095
00149	008010	01	MTTABLE.		CM000095
00150	008020	02	MTAB	OCCURS 6.	CM000095
00151	008030	03	MT1	PICTURE X OCCURS 14.	CM000095
00152	008040	03	MT2	PICTURE XX OCCURS 14.	CM000095
00153	008050	03	MT3	PICTURE X(9) OCCURS 14.	CM000095
00154	008060	03	MT4	PICTURE XXX OCCURS 14.	CM000095
00155	008070	03	MT5	PICTURE X(9) OCCURS 14.	CM000095
00156	008080	03	MT6	PICTURE X(9) OCCURS 14.	CM000095
00157	008090	03	MT7	PICTURE X(9) OCCURS 14.	CM000095
00158	008100	03	MT8	PICTURE X(9) OCCURS 14.	CM000095
00159	008110	03	MT9	PICTURE X(9) OCCURS 14.	CM000095
00160	008120	03	MT10	PICTURE X(10) OCCURS 14.	CM000095
00161	008130	03	MT11	PICTURE X(14) OCCURS 14.	CM000095
00162	009010	01	OSTABLE.		CM000095
00163	009020	02	DSTBL	OCCURS 6.	CM000095
00164	009030	03	OS1	PICTURE X OCCURS 36.	CM000095
00165	009040	03	OS2	PICTURE XX OCCURS 36.	CM000095
00166	009050	03	OS3	PICTURE X(9) OCCURS 36.	CM000095
00167	009060	03	OS4	PICTURE XXX OCCURS 36.	CM000095
00168	009070	03	OS5	PICTURE X(9) OCCURS 36.	CM000095

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00169	009080	03	OS6	PICTURE	X(9)	OCCURS	36.	CM000095
00170	009090	03	OS7	PICTURE	X(9)	OCCURS	36.	CM000095
00171	009100	03	OS8	PICTURE	X(9)	OCCURS	36.	CM000095
00172	009110	03	OS9	PICTURE	X(9)	OCCURS	36.	CM000095
00173	009120	03	OS10	PICTURE	X(10)	OCCURS	36.	CM000095
00174	009130	03	OS11	PICTURE	X(14)	OCCURS	36.	CM000095
00175	010010	01	MCTABLE.					CM000095
00176	010020	02	MCTBL	OCCURS	3.			CM000095
00177	010030	03	MC1	PICTURE	XXX	OCCURS	100.	CM000095
00178	010040	03	MC2	PICTURE	X(9)	OCCURS	100.	CM000095
00179	010050	03	MC3	PICTURE	XXX	OCCURS	100.	CM000095
00180	010060	03	MC4	PICTURE	XX	OCCURS	100.	CM000095
00181	010070	03	MC5	PICTURE	X(9)	OCCURS	100.	CM000095
00182	010080	03	MC6	PICTURE	XX	OCCURS	100.	CM000095
00183	010090	03	MC7	PICTURE	X(9)	OCCURS	100.	CM000095
00184	010100	03	MC8	PICTURE	XX	OCCURS	100.	CM000095
00185	010110	03	MC9	PICTURE	X(9)	OCCURS	100.	CM000095
00186	010120	03	MC10	PICTURE	XX	OCCURS	100.	CM000095
00187	010130	03	MC11	PICTURE	X(9)	OCCURS	100.	CM000095
00188	010140	03	MC12	PICTURE	XX	OCCURS	100.	CM000095
00189	010150	03	MC13	PICTURE	X(9)	OCCURS	100.	CM000095
00190	010160	03	MC14	PICTURE	X(10)	OCCURS	100.	CM000095
00191	010170	03	MC15	PICTURE	X(14)	OCCURS	100.	CM000095
00192	010180	03	MC16	PICTURE	XXX	OCCURS	100.	CM000095
00193	011080	01	ODTABLE.					
00194	011090	02	DI00LE	OCCURS	1.			
00195	011100	03	DD1	PICTURE	X	OCCURS	100.	
00196	011110	03	DD2	PICTURE	XX	OCCURS	100.	
00197	011120	03	DD3	PICTURE	X(9)	OCCURS	100.	
00198	011130	03	DD4	PICTURE	XXX	OCCURS	100.	
00199	011140	03	DD5	PICTURE	XX	OCCURS	100.	
00200	011150	03	DD6	PICTURE	X(9)	OCCURS	100.	
00201	011160	03	DD7	PICTURE	XX	OCCURS	100.	
00202	011170	03	DD8	PICTURE	X(9)	OCCURS	100.	
00203	011180	03	DD9	PICTURE	XX	OCCURS	100.	
00204	011190	03	DD10	PICTURE	X(9)	OCCURS	100.	
00205	011201	01	DOTAB2.					
00206	011202	02	DA00LE	OCCURS	1.			
00207	**011200	03	DD11	PICTURE	XX	OCCURS	100.	
00208	011210	03	DD12	PICTURE	X(9)	OCCURS	100.	
00209	011220	03	DD13	PICTURE	XX	OCCURS	100.	
00210	011230	03	DD14	PICTURE	X(9)	OCCURS	100.	
00211	011240	03	DD15	PICTURE	X(10)	OCCURS	100.	
00212	011250	03	DD16	PICTURE	X(14)	OCCURS	100.	
00213	011260	03	DDSN	PICTURE	X	OCCURS	100.	
00214	012010	01	SRTABLE.					CM000095
00215	012020	02	SRTAB	OCCURS	4.			CM000095
00216	012030	03	SR1	PICTURE	X	OCCURS	8.	CM000095
00217	012040	03	SR2	PICTURE	XX	OCCURS	8.	CM000095
00218	012050	03	SR3	PICTURE	X(9)	OCCURS	8.	CM000095
00219	012060	03	SR4	PICTURE	XXX	OCCURS	8.	CM000095
00220	012070	03	SR5	PICTURE	X(9)	OCCURS	8.	CM000095
00221	012080	03	SR6	PICTURE	X(9)	OCCURS	8.	CM000095
00222	012090	03	SR7	PICTURE	X(9)	OCCURS	8.	CM000095
00223	012100	03	SR8	PICTURE	X(9)	OCCURS	8.	CM000095
00224	012110	03	SR9	PICTURE	X(9)	OCCURS	8.	CM000095
00225	012120	03	SR10	PICTURE	X(10)	OCCURS	8.	CM000095

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00226	012130	03	SR11	PICTURE	X(14)	OCCURS 8.	CM000095
00227	012140	03	SRSN	PICTURE	X	OCCURS 8.	CM000095
00228	013010	01	SQLIST.				CM000095
00229	013020	02	FILLER	PICTURE	X(5)	VALUE SPACE.	CM000095
00230	013030	02	LSC1	PICTURE	XXX.		CM000095
00231	013040	02	FILLER	PICTURE	XXXXXX	VALUE SPACE.	CM000095
00232	013050	02	LSC2	PICTURE	X(9).		CM000095
00233	013060	02	FILLER	PICTURE	XXXX	VALUE SPACE.	CM000095
00234	013070	02	LSC3	PICTURE	XXX.		CM000095
00235	013080	02	FILLER	PICTURE	XXXX	VALUE SPACE.	CM000095
00236	013090	02	LSC4	PICTURE	X(9).		CM000095
00237	013100	02	FILLER	PICTURE	XXXX	VALUE SPACE.	CM000095
00238	013110	02	LSC5	PICTURE	X(9).		CM000095
00239	013120	02	FILLER	PICTURE	XXXX	VALUE SPACE.	CM000095
00240	013130	02	LSC6	PICTURE	X(9).		CM000095
00241	013140	02	FILLER	PICTURE	XXXX	VALUE SPACE.	CM000095
00242	013150	02	LSC7	PICTURE	X(9).		CM000095
00243	013160	02	FILLER	PICTURE	XXXX	VALUE SPACE.	CM000095
00244	013170	02	LSC8	PICTURE	X(9).		CM000095
00245	013180	02	FILLER	PICTURE	XXXX	VALUE SPACE.	CM000095
00246	013190	02	LSC9	PICTURE	X(10).		CM000095
00247	013200	02	FILLER	PICTURE	XXXX	VALUE SPACE.	CM000095
00248	013210	02	LSC10	PICTURE	X(14).		CM000095
00249	013220	02	FILLER	PICTURE	X(5)	VALUE SPACE.	CM000095
00250	014010	01	MTLIST.				CM000095
00251	014020	02	FILLER	PICTURE	X(5)	VALUE SPACE.	CM000095
00252	014030	02	LMT1	PICTURE	X.		CM000095
00253	014040	02	FILLFR	PICTURE	XX	VALUE SPACE.	CM000095
00254	014050	02	LMT2	PICTURE	99.		CM000095
00255	014060	02	FILLER	PICTURE	XXXX	VALUE SPACE.	CM000095
00256	014070	02	LMT3	PICTURE	X(9).		CM000095
00257	014080	02	FILLER	PICTURE	XXXX	VALUE SPACE.	CM000095
00258	014090	02	LMT4	PICTURE	XXX.		CM000095
00259	014100	02	FILLER	PICTURE	XXXX	VALUE SPACE.	CM000095
00260	014110	02	LMT5	PICTURE	X(9).		CM000095
00261	014120	02	FILLFR	PICTURE	XXXX	VALUE SPACE.	CM000095
00262	014130	02	LMT6	PICTURE	X(9).		CM000095
00263	014140	02	FILLER	PICTURE	XXXX	VALUE SPACE.	CM000095
00264	014150	02	LMT7	PICTURE	X(9).		CM000095
00265	014160	02	FILLER	PICTURE	XXXX	VALUE SPACE.	CM000095
00266	014170	02	LMT8	PICTURE	X(9).		CM000095
00267	014180	02	FILLER	PICTURE	XXXX	VALUE SPACE.	CM000095
00268	014190	02	LMT9	PICTURE	X(9).		CM000095
00269	014200	02	FILLFR	PICTURE	XXXX	VALUE SPACE.	CM000095
00270	014210	02	LMT10	PICTURE	X(10).		CM000095
00271	014220	02	FILLER	PICTURE	XXXX	VALUE SPACE.	CM000095
00272	014230	02	LMT11	PICTURE	X(14).		CM000095
00273	014240	02	FILLFR	PICTURE	X(5)	VALUE SPACE.	CM000095
00274	015010	01	OSLIST.				CM000095
00275	015020	02	FILLER	PICTURE	X(5)	VALUE SPACE.	CM000095
00276	015030	02	LOS1	PICTURE	X.		CM000095
00277	015040	02	FILLFR	PICTURE	XX	VALUE SPACE.	CM000095
00278	015050	02	LJS2	PICTURE	99.		CM000095
00279	015060	02	FILLFR	PICTURE	XXXX	VALUE SPACE.	CM000095
00280	015070	02	LOS3	PICTURE	X(9).		CM000095
00281	015080	02	FILLFR	PICTURE	XXXX	VALUE SPACE.	CM000095
00282	015090	02	LOS4	PICTURE	XXX.		CM000095

00283	015100	02	FILLER	PICTURE	XXXX	VALUE SPACE.	CM000095
00284	015110	02	LOS5	PICTURE	X(9).		
00285	015120	02	FILLER	PICTURE	XXXX	VALUE SPACE.	CM000095
00286	015130	02	LOS6	PICTURE	X(9).		CM000095
00287	015140	02	FILLER	PICTURE	XXXX	VALUE SPACE.	CM000095
00288	015150	02	LOS7	PICTURE	X(9).		CM000095
00289	015160	02	FILLER	PICTURE	XXXX	VALUE SPACE.	CM000095
00290	015170	02	LOS8	PICTURE	X(9).		CM000095
00291	015180	02	FILLER	PICTURE	XXXX	VALUE SPACE.	CM000095
00292	015190	02	LOS9	PICTURE	X(9).		CM000095
00293	015200	02	FILLER	PICTURE	XXXX	VALUE SPACE.	CM000095
00294	015210	02	LOS10	PICTURE	X(10).		CM000095
00295	015220	02	FILLER	PICTURE	XXXX	VALUE SPACE.	CM000095
00296	015230	02	LOS11	PICTURE	X(14).		CM000095
00297	015240	02	FILLER	PICTURE	X(5)	VALUE SPACE.	
00298	016010	01	MCLIST.				CM000095
00299	016020	02	FILLER	PICTURE	X(5)	VALUE SPACE.	CM000095
00300	016030	02	LMC1	PICTURE	999.		CM000095
00301	016040	02	FILLER	PICTURE	XXXX	VALUE SPACE.	CM000095
00302	016050	02	LMC2	PICTURE	X(9).		CM000095
00303	016060	02	FILLER	PICTURE	XX	VALUE SPACE.	CM000095
00304	016070	02	LMC3	PICTURE	XXX.		CM000095
00305	016080	02	FILLER	PICTURE	XX	VALUE SPACE.	CM000095
00306	016090	02	LMC4	PICTURE	XX.		CM000095
00307	016100	02	FILLER	PICTURE	XX	VALUE SPACE.	CM000095
00308	016110	02	LMC5	PICTURE	X(9).		CM000095
00309	016120	02	FILLER	PICTURE	XX	VALUE SPACE.	CM000095
00310	016130	02	LMC6	PICTURE	XX.		CM000095
00311	016140	02	FILLER	PICTURE	XX	VALUE SPACE.	CM000095
00312	016150	02	LMC7	PICTURE	X(9).		CM000095
00313	016160	02	FILLER	PICTURE	XX	VALUE SPACE.	CM000095
00314	016170	02	LMC8	PICTURE	XX.		CM000095
00315	016180	02	FILLER	PICTURE	XX	VALUE SPACE.	CM000095
00316	016190	02	LMC9	PICTURE	X(9).		CM000095
00317	016200	02	FILLER	PICTURE	XX	VALUE SPACE.	CM000095
00318	016210	02	LMC10	PICTURE	XX.		CM000095
00319	016220	02	FILLER	PICTURE	XX	VALUE SPACE.	CM000095
00320	016230	02	LMC11	PICTURE	X(9).		CM000095
00321	016240	02	FILLER	PICTURE	XX	VALUE SPACE.	CM000095
00322	016250	02	LMC12	PICTURE	XX.		CM000095
00323	017010	02	FILLER	PICTURE	XX	VALUE SPACE.	CM000095
00324	017020	02	LMC13	PICTURE	X(9).		CM000095
00325	017030	02	FILLER	PICTURE	XX	VALUE SPACE.	CM000095
00326	017040	02	LMC14	PICTURE	X(10).		CM000095
00327	017050	02	FILLER	PICTURE	XX	VALUE SPACE.	CM000095
00328	017060	02	LMC15	PICTURE	X(14).		CM000095
00329	017070	02	FILLER	PICTURE	XX	VALUE SPACE.	CM000095
00330	017080	02	LMC16	PICTURE	X	VALUE SPACE.	CM000095
00331	019010	01	DDL1ST.				CM000095
00332	019020	02	FILLER	PICTURE	X(14)	VALUE SPACE.	CM000095
00333	019030	02	LDD1	PICTURE	Z.		
00334	019040	02	FILLER	PICTURE	XX	VALUE SPACE.	
00335	019050	02	LDD2	PICTURE	Z99.		
00336	019060	02	FILLER	PICTURE	XX	VALUE SPACE.	CM000095
00337	019070	02	LDD3	PICTURE	X(9).		CM000095
00338	019080	02	FILLER	PICTURE	XX	VALUE SPACE.	CM000095
00339	019090	02	LDD4	PICTURE	XXX.		CM000095

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00340	019100	02	FILLER	PICTURE XX	VALUE SPACE.	CM000095
00341	019110	02	LOD5	PICTURE XX		CM000095
00342	019111	02	FILLER	PICTURE X	VALUE SPACE.	
00343	019120	02	FILLER1	PICTURE XX	VALUE SPACE.	CM000095
00344	019130	02	LOD6	PICTURE X(9)		CM000095
00345	019140	02	FILLER	PICTURE X	VALUE SPACE.	
00346	019150	02	LOD7	PICTURE XX		CM000095
00347	019151	02	FILLER	PICTURE X	VALUE SPACE.	
00348	019160	02	FILLER2	PICTURE XX	VALUE SPACE.	CM000095
00349	019170	02	LOD8	PICTURE X(9)		CM000095
00350	019180	02	FILLER	PICTURE X	VALUE SPACE.	
00351	019190	02	LOD9	PICTURE XX		CM000095
00352	019191	02	FILLER	PICTURE X	VALUE SPACE.	
00353	019200	02	FILLER3	PICTURE XX	VALUE SPACE.	CM000095
00354	019210	02	LOD10	PICTURE X(9)		CM000095
00355	019220	02	FILLER	PICTURE X	VALUE SPACE.	
00356	019230	02	LOD11	PICTURE XX		CM000095
00357	019231	02	FILLER	PICTURE X	VALUE SPACE.	
00358	019240	02	FILLER4	PICTURE XX	VALUE SPACE.	CM000095
00359	019250	02	LOD12	PICTURE X(9)		CM000095
00360	020010	02	FILLER	PICTURE X	VALUE SPACE.	
00361	020020	02	LOD13	PICTURE XX		CM000095
00362	020021	02	FILLER	PICTURE X	VALUE SPACE.	
00363	020030	02	FILLER5	PICTURE XX	VALUE SPACE.	CM000095
00364	020040	02	LOD14	PICTURE X(9)		CM000095
00365	020050	02	FILLER	PICTURE X	VALUE SPACE.	
00366	020060	02	LOD15	PICTURE X(10)		CM000095
00367	020070	02	FILLER	PICTURE XX	VALUE SPACE.	CM000095
00368	020080	02	LOD16	PICTURE X(14)		CM000095
00369	020090	02	FILLER	PICTURE XXX	VALUE SPACE.	CM000095
00370	022080 01		HEADMCD.			CM000095
00371	022090	02	MCD0	PICTURE X(12)	VALUE 'SCAN'	CM000095
00372	022100	02	FILLER	PICTURE X(13)	VALUE 'PARAMETER UNIT CODE	LOADCM000095
00373	022110-		'CODE LOAD	CODE LOAD	CODE LOAD	CODE LOADCM000095
00374	022120-		'REFERENCE	REMARKS'		CM000095
00375	022130	02	FILLER	PICTURE X(7)	VALUE SPACE.	CM000095
00376	023010 01		DDAS-HD.			
00377	023020	02	FILLER	PICTURE X(48)	VALUE SPACE.	
00378	023030	02	FILLER	PICTURE X(31)	VALUE 'DIGITAL DATA ACQUISITION S	
00379	023040-		'SYSTEM'.			
00380	023050	02	FILLER	PICTURE X(32)	VALUE SPACE.	
00381	023060	02	FILLER	PICTURE X(14)	VALUE 'SHEET OF R'.	
00382	023070	02	FILLER	PICTURE X(7)	VALUE SPACE.	
00383	**021010 01		SRLIST.			CM000095
00384	021020	02	FILLER	PICTURE X(5)	VALUE SPACE.	CM000095
00385	021030	02	LSR1	PICTURE X	VALUE SPACE.	
00386	021040	02	FILLER	PICTURE XX	VALUE SPACE.	CM000095
00387	021050	02	LSR2	PICTURE 99.		CM000095
00388	021060	02	FILLER	PICTURE XXXX	VALUE SPACE.	
00389	021070	02	LSR3	PICTURE X(9)		CM000095
00390	021080	02	FILLER	PICTURE XXXX	VALUE SPACE.	
00391	021090	02	LSR4	PICTURE XXX.		CM000095
00392	021100	02	FILLER A	PICTURE XXXX	VALUE SPACE.	CM000095
00393	021110	02	LSR5	PICTURE X(9)		CM000095
00394	021120	02	FILLER B	PICTURE XXXX	VALUE SPACE.	CM000095
00395	021130	02	LSR6	PICTURE X(9)		CM000095
00396	021140	02	FILLER C	PICTURE XXXX	VALUE SPACE.	

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00397	021150	02	LSR7	PICTURE	X(9).			CM000095
00398	021160	02	FILLER0	PICTURE	XXXX	VALUE	SPACE.	CM000095
00399	021170	02	LSR8	PICTURE	X(9).			CM000095
00400	021180	02	FILLERE	PICTURE	XXXX	VALUE	SPACE.	CM000095
00401	021190	02	LSR9	PICTURE	X(9).			CM000095
00402	021200	02	FILLER	PICTURE	XXXX	VALUE	SPACE.	CM000095
00403	021210	02	LSR10	PICTURE	X(10).			CM000095
00404	021220	02	FILLER	PICTURE	XXXX	VALUE	SPACE.	CM000095
00405	021230	02	LSR11	PICTURE	X(14).			CM000095
00406	021240	02	FILLER	PICTURE	X(5)	VALUE	SPACE.	CM000095
00407	022010	01	HEADSMOS.					CM000095
00408	022020	02	SCMTD	PICTURE	X(12)	VALUE	' ST CH '	CM000095
00409	022030	02	FILLER	PICTURE	X(120)	VALUE	' PARAMETER UNITS RND	
00410	022040-		' EQUIV	RN1 EQUIV	RN2 EQUIV	RN3 EQUIV	RN4 EQUIV	
00411	022050-		' REFERENCE	REMARKS				
00412	023010	01	SC-HO.					
00413	023020	02	FILLER	PICTURE	X(43)	VALUE	SPACE.	
00414	023030	02	FILLER	PICTURE	X(36)	VALUE	'STRIP CHART DATA REDUCTION	
00415	023040-							
00416	023050	02	FILLER	PICTURE	X(29)	VALUE	SPACE.	
00417	023060	02	FILLER	PICTURE	X(14)	VALUE	'SHEET OF R'.	
00418	023070	02	FILLER	PICTURE	X(10)	VALUE	SPACE.	
00419	023090	01	MT-HO.					
00420	023100	02	FILLER	PICTURE	X(43)	VALUE	SPACE.	
00421	023110	02	FLLX	PICTURE	X(15)	VALUE	'MAGNETIC TAPE -'.	
00422	023120	02	FLP	PICTURE	X.			
00423	023130	02	FILLER	PICTURE	X(16)	VALUE	'- DATA REDUCTION'.	
00424	023140	02	FILLER	PICTURE	X(33)	VALUE	SPACE.	
00425	023150	02	FILLER	PICTURE	X(14)	VALUE	'SHEET OF R'.	
00426	023160	02	FILLER	PICTURE	X(10)	VALUE	SPACE.	
00427	023180	01	MC-HO.					
00428	023190	02	FILLER	PICTURE	X(53)	VALUE	SPACE.	
00429	023200	02	FIXR	PICTURE	X(32)	VALUE	'MICROSADIC DATA REDUCTION	
00430	023210-							
00431	023220	02	FILLER	PICTURE	X(26)	VALUE	SPACE.	
00432	023230	02	FILLER	PICTURE	X(14)	VALUE	'SHEET OF R'.	
00433	023240	02	FILLER	PICTURE	X(7)	VALUE	SPACE.	
00434	024010	01	DUM-HEAD.					
00435	024020	02	SCF	PICTURE	X(32)	VALUE	'SCANNER VALVE DATA REDUCTI	
00436	024030-		'DN					
00437	024040	02	OSF	PICTURE	X(15)	VALUE	' OSCILLOGRAPH -'.	
00438	024050	02	SKF	PICTURE	X(32)	VALUE	'SANBORN RECORDER DATA REDU	
00439	024060-		'CTION					
00440	030010		PROCEURE DIVISION.					CM000095
00441	030020		OPEN INPUT CARD OUTPUT DCARD.					CM000095
00442	030021		OPEN OUTPUT LIST.					
00443	030030	P1.						CM000095
00444	030040		READ CARD AT END GO TO P2.					CM000095
00445	030050		WRITE DCAR FROM CAR.					CM000095
00446	030060		GO TO P1.					CM000095
00447	030070	P2.						CM000095
00448	030080		CLOSE CARD.					
00449	030100		OPEN INPUT HOOK.					CM000095
00450	030130		PERFORM SPACE-T8.					CM000095
00451	**030110		PERFORM OP-BF THRU BEND.					CM000095
00452	030120		PERFORM DO-U THRU ALL-ON.					CM000095
00453	031010	RD-HK.						CM000095

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00454. 031131. CLOSE DCARD.
00455 **031012 RD-HK1.
00456. 031020 READ HOOK AT END GO TO HK-END. CM000095
00457 IF HR3 = 'A' MOVE 1 TO N.
00458 IF HR3 = 'B' MOVE 2 TO N.
00459 IF HR3 = 'C' MOVE 3 TO N.
00460 IF HR3 = 'D' MOVE 4 TO N.
00461 IF HR3 = 'E' MOVE 5 TO N.
00462 IF HR3 = 'F' MOVE 6 TO N.
00463 031030 IF HR12 = 'SC' GO TO MN1. CM000095
00464 031040 IF HR12 = 'MT' GO TO MN2. CM000095
00465 031050 IF HR12 = 'DS' GO TO MN3. CM000095
00466 031060 IF HR12 = 'MC' GO TO MN4. CM000095
00467 031090 IF HR12 = 'DD' GO TO MN6. CM000095
00468 031100 IF HR12 = 'SR' GO TO MN7. CM000095
00469 031110 GO TO RD-HK1.
00470 031130 MN1. CM000095
00471 MOVE HPAR TO SC2 (R345).
00472 031140 OPEN INPUT DCARD. CM000095
00473 031150 MN1A. CM000095
00474 031160 READ DCARD AT END GO TO MN1Z. CM000095
00475 031170 IF DR1 NOT = HPAR GO TO MN1A. CM000095
00476 031180 IF DR2 = ' ' GO TO MN1Z. CM000095
00477 031200 GO TO SC-ROUTE. CM000095
00478 031210 MN2. CM000095
00479 MOVE HPAR TO MT3 (N,RHR45).
00480 031220 OPEN INPUT DCARD. CM000095
00481 031230 MN2A. CM000095
00482 031240 READ DCARD AT END GO TO MN1Z. CM000095
00483 031250 IF DR1 NOT = HPAR GO TO MN2A. CM000095
00484 032010 IF DR4 = ' ' GO TO MN1Z. CM000095
00485 032030 GO TO MT-ROUTE. CM000095
00486 032040 MN3. CM000095
00487 MOVE HPAR TO DS3 (N,RHR45).
00488 032050 OPEN INPUT DCARD. CM000095
00489 032060 MN3A. CM000095
00490 032070 READ DCARD AT END GO TO MN1Z. CM000095
00491 032080 IF DR1 NOT = HPAR GO TO MN3A. CM000095
00492 032090 IF DR3 = ' ' GO TO MN1Z.
00493 032110 GO TO DS-ROUT.
00494 032120 MN4. CM000095
00495 IF R345 < 100 MOVE 1 TO J MOVE R345 TO K GO TO BLUE.
00496 IF R345 < 200 SUBTRACT 100 FROM R345 GIVING K MOVE 3 TO J
00497 GO TO BLUE.
00498 SUBTRACT 400 FROM R345 GIVING K.
00499 MOVE 2 TO J.
00500 BLUF.
00501 MOVE HPAR TO MC2 (J,K).
00502 032130 OPEN INPUT DCARD. CM000095
00503 032140 MN4A. CM000095
00504 032150 READ DCARD AT END GO TO MN1Z. CM000095
00505 032160 IF DR1 NOT = HPAR GO TO MN4A. CM000095
00506 032170 IF DR5 = ' ' GO TO MN1Z. CM000095
00507 032190 GO TO MC-ROUTE. CM000095
00508 032200 MN6. CM000095
00509 MOVE RHR45 TO K.
00510 IF HHR3 = 0 AND RHR45 = 0 MOVE 100 TO K.

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00511          IF HHR3 = 0
00512          MOVE HPAR TO 003 (1,K).
00513 032210    OPEN INPUT DCARD. CM000095
00514 032220    MN6A. CM000095
00515 032230    READ DCARD AT END GO TO MN1Z. CM000095
00516 032240    IF DR1 NOT = HPAR GO TO MN6A. CM000095
00517 032250    IF DR7 = ' ' GO TO MN1Z. CM000095
00518 033020    GO TO 00-ROUTE. CM000095
00519 033030    MN7. CM000095
00520          MOVE HPAR TO SR3 (HHR3,RHR45).
00521 033040    OPEN INPUT DCARD. CM000095
00522 033050    MN7A. CM000095
00523 033060    READ DCARD AT END GO TO MN1Z. CM000095
00524 033070    IF DR1 NOT = HPAR GO TO MN7A. CM000095
00525 033080    IF DR8 = ' ' GO TO MN1Z. CM000095
00526 033100    GO TO SR-ROUTE.
00527 033110    MN1Z. CM000095
00528 033120    DISPLAY 'DATA REQ. N/A ' DR1. CM000095
00529 033140    GO TO RD-HK. CM000095
00530 034010    SC-ROUTE. CM000095
00531 034011    MOVE JJ TO J.
00532 034020    PERFORM MTH-RO VARYING K FROM 1 BY 1 UNTIL K > J OR SW1 = 1. CM000095
00533 034070    MOVE 0 TO SW1. CM000095
00534 **034030    IF K > J DISPLAY 'SCI NOT = READ' GO TO RO-HK. GO TO SCR1. CM000095
00535 034040    MTH-RO. CM000095
00536 034050    IF HR345 = SC1 (K) MOVE 1 TO SW1. CM000095
00537 034060    SCR1. CM000095
00538 034071    COMPUTE K = K - 1.
00539 034080    IF ROR2 = 'M' MOVE 'MV CALS' TO SC10 (K) GO TO SCR10. CM000095
00540 034090    IF ROR2 = 'I' MOVE 'IN PLACE CALS' TO SC10 (K) GO TO SCR10. CM000095
00541 034100    IF ROR2 = 'S' MOVE 'SPECIAL CALS' TO SC10 (K) GO TO SCR10. CM000095
00542 034110    IF ROR2 NOT = 'R' DISPLAY '3411' DR2 GO TO RO-HK. CM000095
00543 034120    OPEN INPUT CFILE. CM000095
00544 034130    SCR2. CM000095
00545 034140    READ CFILE AT END GO TO CENO. CM000095
00546 034150    IF C9 NOT = '0' GO TO SCR2.
00547 034160    IF HPAR NOT = C9 GO TO SCR2. CM000095
00548 034170    IF C10 = SPACE GO TO SCR3. CM000095
00549 034180    MOVE C10 TO SC4 (K). CM000095
00550 034200    READ CFILE AT END GO TO CENO. CM000095
00551 034220    MOVE C10 TO SC5 (K). CM000095
00552 034240    READ CFILE AT END GO TO CENO. CM000095
00553 035010    MOVE C10 TO SC6 (K). CM000095
00554 035030    READ CFILE AT END GO TO CENO. CM000095
00555 035050    MOVE C10 TO SC7 (K). CM000095
00556 035070    READ CFILE AT END GO TO CENO. CM000095
00557 035090    MOVE C10 TO SC8 (K). CM000095
00558 035110    GO TO SCR9. CM000095
00559 035120    SCR3. CM000095
00560 035130    IF C11 = SPACE DISPLAY 'C10 C11 = SPACE 3513' GO TO CENO. CM000095
00561 035140    MOVE C11 TO SC4 (K). CM000095
00562 035160    READ CFILE AT END GO TO CENO. CM000095
00563 035180    MOVE C11 TO SC5 (K). CM000095
00564 035200    READ CFILE AT END GO TO CENO. CM000095
00565 035220    MOVE C11 TO SC6 (K). CM000095
00566 035240    READ CFILE AT END GO TO CENO. CM000095
00567 036010    MOVE C11 TO SC7 (K). CM000095

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00568	036030	READ CFIL AT END GO TO MCEND.	CM000095
00569	036050	MOVE C11 TO SC8 (K).	CM000095
00570	036070	SCR9.	CM000095
00571	036080	MOVE C118 TO SC3 (K).	CM000095
00572	036200	CLOSE CFIL.	CM000095
00573	**036090	SCR10.	CM000095
00574	036100	IF DR6 = 'CP' MOVE 'CELL PRESS' TO SC9 (K) GO TO SCR11.	CM000095
00575	036110	IF DR6 = 'BA' MOVE 'BAROMETER' TO SC9 (K) GO TO SCR11.	CM000095
00576	036120	IF DR6 = 'VR' MOVE 'VAC. REF.' TO SC9 (K) GO TO SCR11.	CM000095
00577	036130	IF DR6 = 'RT' MOVE 'RTT' TO SC9 (K) GO TO SCR11.	CM000095
00578	036140	IF DR6 = 'CA' MOVE 'CA-150 D-F' TO SC9 (K) GO TO SCR11.	CM000095
00579	036150	IF DR6 = 'CC' MOVE 'CC-150 D-F' TO SC9 (K) GO TO SCR11.	CM000095
00580	036160	IF DR6 = 'IC' MOVE 'IC-150 D-F' TO SC9 (K) GO TO SCR11.	CM000095
00581	036170	IF DR6 = 'EV' MOVE 'EVENT' TO SC9 (K).	CM000095
00582	036180	SCR11.	CM000095
00583	036190	MOVE HPAR TO SC2 (K).	CM000095
00584	036210	GO TO RD-HK.	CM000095
00585	036220	CEND.	CM000095
00586	036230	DISPLAY '3623'	CM000095
00587	036240	CLOSE CFIL.	CM000095
00588	036250	GO TO RD-HK.	CM000095
00589	037010	MT-RDUTE.	CM000095
00590	037020	IF HR3 = 'A' MOVE 1 TO J.	CM000095
00591	037030	IF HR3 = 'B' MOVE 2 TO J.	CM000095
00592	037040	IF HR3 = 'C' MOVE 3 TO J.	CM000095
00593	037050	IF HR3 = 'O' MOVE 4 TO J.	CM000095
00594	037060	IF HR3 = 'E' MOVE 5 TO J.	CM000095
00595	037070	IF HR3 = 'F' MOVE 6 TO J.	CM000095
00596	037080	MOVE RHR45 TO K.	CM000095
00597	037090	IF DR4B = 'M' MOVE 'MV CALS' TO MT11 (J, K) GO TO MTR10.	CM000095
00598	037100	IF DR4B = 'I' MOVE 'IN PLAC. CALS' TO MT11 (J, K)	CM000095
00599	037110	GO TO MTR10.	CM000095
00600	037120	IF DR4B = 'S' MOVE 'SPECIAL CAL' TO MT11 (J, K) GO TO MTR10.	CM000095
00601	037130	IF DR4B NOT = 'R' DISPLAY '3713' GO TO RD-HK.	CM000095
00602	037140	OPEN INPUT CFIL.	CM000095
00603	037150	MTR1.	CM000095
00604	037160	READ CFIL AT END GO TO MCEND.	CM000095
00605	037170	IF C9 NDT = 'O' GO TO MTR1.	CM000095
00606	037180	IF HPAR NOT = C5 GO TO MTR1.	CM000095
00607	037190	IF C10 = SPACE GO TO MTR2.	CM000095
00608	037200	MOVE C10 TO MT5 (J, K).	CM000095
00609	037210	READ CFIL AT END GO TO MCEND.	CM000095
00610	037220	MOVE C10 TO MT6 (J, K).	CM000095
00611	037230	READ CFIL AT END GO TO MCEND.	CM000095
00612	037240	MOVE C10 TO MT7 (J, K).	CM000095
00613	037250	READ CFIL AT END GO TO MCENO.	CM000095
00614	038010	MOVE C10 TO MT8 (J, K).	CM000095
00615	038020	READ CFIL AT END GO TO MCEND.	CM000095
00616	038030	MOVE C10 TO MT9 (J, K).	CM000095
00617	038040	GO TO MTR9.	CM000095
00618	038050	MTR2.	CM000095
00619	038060	IF C11 = SPACE DISPLAY 'C10 C11 = SPACE' C7 GO TO MCENO.	CM000095
00620	038070	MOVE C11 TO MT5 (J, K).	CM000095
00621	038080	READ CFIL AT END GO TO MCEND.	CM000095
00622	038090	MOVE C11 TO MT6 (J, K).	CM000095
00623	038100	READ CFIL AT END GO TO MCENO.	CM000095
00624	038110	MOVE C11 TO MT7 (J, K).	CM000095

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00625 038120 READ CFILE AT END GO TO MCENO. CM000095
00626 038130 MOVE C11 TO MT8 (J, K). CM000095
00627 038140 READ CFILE AT END GO TO MCENO. CM000095
00628 038150 MOVE C11 TO MT9 (J, K). CM000095
00629 038160 MTR9. CM000095
00630 038170 MOVE C118 TO MT4 (J, K). CM000095
00631 039120 CLOSE CFILE. CM000095
00632 **039010 MTR10. CM000095
00633 039020 IF OR6 = 'CP' MOVE 'CELL PRESS' TO MT10 (J, K) GO TO MTR11. CM000095
00634 039030 IF OR6 = 'BA' MOVE 'BAROMETER' TO MT10 (J, K) GO TO MTR11. CM000095
00635 039040 IF OR6 = 'VR' MOVE 'VAC. REF.' TO MT10 (J, K) GO TO MTR11. CM000095
00636 039050 IF OR6 = 'RT' MOVE 'RTT' TO MT10 (J, K) GO TO MTR11. CM000095
00637 039060 IF OR6 = 'CA' MOVE 'CA-150 D-F' TO MT10 (J, K) GO TO MTR11. CM000095
00638 039070 IF OR6 = 'CC' MOVE 'CC-150 O-F' TO MT10 (J, K) GO TO MTR11. CM000095
00639 039080 IF OR6 = 'IC' MOVE 'IC-150 D-F' TO MT10 (J, K) GO TO MTR11. CM000095
00640 039090 IF OR6 = 'EV' MOVE 'EVENT' TO MT10 (J, K). CM000095
00641 039100 MTR11. CM000095
00642 039110 MOVE HPAR TO MT3 (J, K). CM000095
00643 039130 GO TO RD-HK. CM000095
00644 039140 MCENO. CM000095
00645 039150 DISPLAY '3915'. CM000095
00646 039160 CLOSE CFILE. CM000095
00647 039170 GO TO RD-HK. CM000095
00648 040010 OS-ROUT. CM000095
00649 040020 IF HR3 = 'A' MOVE 1 TO J GO TO OSR1. CM000095
00650 040030 IF HR3 = 'B' MOVE 2 TO J GO TO OSR1. CM000095
00651 040040 IF HR3 = 'C' MOVE 3 TO J GO TO OSR1. CM000095
00652 040050 IF HR3 = 'D' MOVE 4 TO J GO TO OSR1. CM000095
00653 040060 IF HR3 = 'E' MOVE 5 TO J GO TO OSR1. CM000095
00654 040070 IF HR3 = 'F' MOVE 6 TO J. CM000095
00655 040071 OSR1. CM000095
00656 040080 IF RHR45 > 34 DISPLAY 'OS-ROUT > 34' HROUT GO TO RD-HK. CM000095
00657 040090 MOVE RHR45 TO K. CM000095
00658 040100 IF OR3B = 'M' MOVE 'MV CALS' TO OS11 (J, K) GO TO OSR10. CM000095
00659 040110 IF OR3B = 'I' MOVE 'IN PLACE CALS' TO OS11 (J, K) GO TO CM000095
00660 040120 OSR10. CM000095
00661 040130 IF OR3B = 'S' MOVE 'SPECIAL CAL' TO OS11 (J, K) GO TO OSR10. CM000095
00662 040140 IF DR3B NOT = 'R' DISPLAY '4014' OR3 GO TO RD-HK. CM000095
00663 040150 OPEN INPUT CFILE. CM000095
00664 040160 OSR2. CM000095
00665 040170 READ CFILE AT ENO GO TO OSCENO. CM000095
00666 040180 IF C9 NOT = '0' GO TO OSR2. CM000095
00667 040190 IF HPAR NOT = C5 GO TO OSR2. CM000095
00668 040200 IF C10 = SPACE GO TO OSR3. CM000095
00669 040210 MOVE C10 TO OS5 (J, K). CM000095
00670 040220 READ CFILE AT ENO GO TO OSCENO. CM000095
00671 040230 MOVE C10 TO OS6 (J, K). CM000095
00672 040240 READ CFILE AT ENO GO TO OSCENO. CM000095
00673 040250 MOVE C10 TO OS7 (J, K). CM000095
00674 040260 READ CFILE AT ENO GO TO OSCENO. CM000095
00675 040270 MOVE C10 TO OS8 (J, K). CM000095
00676 040280 READ CFILE AT ENO GO TO OSCENO. CM000095
00677 040290 MOVE C10 TO OS9 (J, K). CM000095
00678 040300 GO TO OSR9. CM000095
00679 040310 OSR3. CM000095
00680 040320 IF C11 = SPACE DISPLAY '4107' C7 GO TO OSCENO. CM000095
00681 040330 MOVE C11 TO OS5 (J, K). CM000095

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00682 041090 READ CFILE AT END GO TO OSCEND. CM000095
00683 041100 MOVE C11 TO OS6 (J, K). CM000095
00684 041110 READ CFILE AT END GO TO OSCEND. CM000095
00685 041120 MOVE C11 TO OS7 (J, K). CM000095
00686 041130 READ CFILE AT END GO TO OSCEND. CM000095
00687 041140 MOVE C11 TO OS8 (J, K). CM000095
00688 041150 READ CFILE AT END GO TO OSCEND. CM000095
00689 041160 MOVE C11 TO OS9 (J, K). CM000095
00690 041170 OSR9. CM000095
00691 041180 MOVE C118 TO OS4 (J, K). CM000095
00692 042120 CLOSE CFILE. CM000095
00693 **042010 OSR10. CM000095
00694 042020 IF DR6 = 'CP' MOVE 'CELL PRESS' TO OS10 (J, K) GO TO OOPS. CM000095
00695 042030 IF DR6 = 'BA' MOVE 'BAROMETER' TO OS10 (J, K) GO TO OOPS. CM000095
00696 042040 IF DR6 = 'VR' MOVE 'VAC. REF.' TO OS10 (J, K) GO TO OOPS. CM000095
00697 042050 IF DR6 = 'RT' MOVE 'RTT' TO OS10 (J, K) GO TO OOPS. CM000095
00698 042060 IF DR6 = 'CA' MOVE 'CA-1500-F' TO OS10 (J, K) GO TO OOPS. CM000095
00699 042070 IF DR6 = 'CC' MOVE 'CC-1500-F' TO OS10 (J, K) GO TO OOPS. CM000095
00700 042080 IF DR6 = 'IC' MOVE 'IC-1500-F' TO OS10 (J, K) GO TO OOPS. CM000095
00701 042090 IF DR6 = 'EV' MOVE 'EVENT' TO OS10 (J, K). CM000095
00702 042100 OOPS. CM000095
00703 042110 MOVE HPAR TO OS3 (J, K) CM000095
00704 042130 GO TO RD-HK. CM000095
00705 042140 OSCEND. CM000095
00706 042150 DISPLAY '4215' CM000095
00707 042160 CLOSE CFILE. CM000095
00708 042170 GO TO RD-HK. CM000095
00709 043010 MC-ROUTE. CM000095
00710 043020 IF R345 < 100 MOVE 1 TO MSW1 J MOVE R345 TO K GO TO MCR1. CM000095
00711 043030 IF R345 < 200 MOVE 1 TO MSW3 SUBTRACT 100 FROM R345 GIVING K CM000095
00712 043040 MOVE 3 TO J GO TO MCR1. CM000095
00713 043050 IF R345 < 400 DISPLAY '4305' HRODOUT GO TO RD-HK. CM000095
00714 043060 IF R345 > 499 DISPLAY '4306' HRODOUT GO TO RD-HK. CM000095
00715 043070 MOVE 1 TO MSW2 SUBTRACT 400 FROM R345 GIVING K CM000095
00716 043080 MOVE 2 TO J. CM000095
00717 043090 MCR1. CM000095
00718 043091 COMPUTE K = K + 1 CM000095
00719 043100 IF DR58 = 'M' GO TO MCR2. CM000095
00720 043110 IF DR58 = 'I' MOVE 'IN PLACE CALS' TO MC15 (J, K) CM000095
00721 043120 GO TO MCR10. CM000095
00722 043130 IF DR58 = 'S' MOVE 'SPECIAL CAL' TO MC15 (J, K) GO TO MCR10. CM000095
00723 043140 IF DR58 NOT = 'R' DISPLAY '4314' DR5 GO TO RD-HK. CM000095
00724 043150 OPEN INPUT CFILE. CM000095
00725 043160 MCR3. CM000095
00726 043170 READ CFILE AT END GO TO MCCEND. CM000095
00727 043180 IF C9 NOT = '0' GO TO MCR3. CM000095
00728 043190 IF HPAR NOT = C5 GO TO MCR3. CM000095
00729 043200 IF DR5A = '1' CM000095
00730 043210 MOVE '05' TO MC4 (J, K) CM000095
00731 043220 MOVE '06' TO MC5 (J, K) CM000095
00732 043230 MOVE '07' TO MC8 (J, K) CM000095
00733 043240 MOVE '08' TO MC10 (J, K) CM000095
00734 043250 MOVE '09' TO MC12 (J, K) CM000095
00735 044010 GO TO MCR4. CM000095
00736 044020 IF DR5A = '2' OR '3' CM000095
00737 044030 MOVE '25' TO MC4 (J, K) CM000095
00738 044040 MOVE '26' TO MC6 (J, K) CM000095

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00739 044050 MOVE '27' TO MC8 (J, K) CM000095
00740 044060 MOVE '28' TO MC10 (J, K) CM000095
00741 044070 MOVE '29' TO MC12 (J, K) CM000095
00742 044080 GO TO MCR4. CM000095
00743 044090 IF ORSA = '4' CM000095
00744 044100 MOVE '45' TO MC4 (J, K) CM000095
00745 044110 MOVE '46' TO MC6 (J, K) CM000095
00746 044120 MOVE '47' TO MC8 (J, K) CM000095
00747 044130 MOVE '48' TO MC10 (J, K) CM000095
00748 044140 MOVE '49' TO MC12 (J, K) CM000095
00749 044150 GO TO MCR4. CM000095
00750 044160 IF ORSA = '5' CM000095
00751 044170 MOVE '65' TO MC4 (J, K) CM000095
00752 044180 MOVE '66' TO MC6 (J, K) CM000095
00753 044190 MOVE '67' TO MC8 (J, K) CM000095
00754 044200 MOVE '68' TO MC10 (J, K) CM000095
00755 044210 MOVE '69' TO MC12 (J, K) CM000095
00756 044220 GO TO MCR4. CLOSE CFILE. CM000095
00757 044230 DISPLAY '4423' ORS GO TO RD-HK. CM000095
00758 045010 MCR4. CM000095
00759 045020 IF C10 = SPACE GO TO MCR5. CM000095
00760 045030 MOVE C10 TO MC5 (J, K) CM000095
00761 045040 READ CFILE AT END GO TO MCCEND. CM000095
00762 045050 MOVE C10 TO MC7 (J, K) CM000095
00763 045060 READ CFILE AT END GO TO MCCEND. CM000095
00764 045070 MOVE C10 TO MC9 (J, K) CM000095
00765 045080 READ CFILE AT END GO TO MCCEND. CM000095
00766 045090 MOVE C10 TO MC11 (J, K) CM000095
00767 045100 READ CFILE AT END GO TO MCCEND. CM000095
00768 045110 MOVE C10 TO MC13 (J, K) CM000095
00769 045120 GO TO MCR9. CM000095
00770 045130 MCR5. CM000095
00771 045140 IF C11 = SPACE DISPLAY '4514' C7 GO TO MCCEND. CM000095
00772 045150 MOVE C11 TO MC5 (J, K) CM000095
00773 045160 READ CFILE AT END GO TO MCCEND. CM000095
00774 045170 MOVE C11 TO MC7 (J, K) CM000095
00775 045180 READ CFILE AT END GO TO MCCEND. CM000095
00776 045190 MOVE C11 TO MC9 (J, K) CM000095
00777 045200 READ CFILE AT END GO TO MCCEND. CM000095
00778 045210 MOVE C11 TO MC11 (J, K) CM000095
00779 045220 READ CFILE AT END GO TO MCCEND. CM000095
00780 045230 MOVE C11 TO MC13 (J, K) CM000095
00781 045240 MCR9. CM000095
00782 045250 MOVE C11B TO MC3 (J, K) CM000095
00783 046120 CLOSE CFILE. CM000095
00784 **046010 MCR10. CM000095
00785 046020 IF DR6 = 'CP' MOVE 'CELL PRESS' TO MC14 (J, K) GO TO MUMP. CM000095
00786 046030 IF DR6 = 'BA' MOVE 'BAROMETER' TO MC14 (J, K) GO TO MUMP. CM000095
00787 046040 IF DR6 = 'VR' MOVE 'VAC. REF.' TO MC14 (J, K) GO TO MUMP. CM000095
00788 046050 IF DR6 = 'RT' MOVE 'RTT' TO MC14 (J, K) GO TO MUMP. CM000095
00789 046060 IF DR6 = 'CA' MOVE 'CA-1500-F' TO MC14 (J, K) GO TO MUMP. CM000095
00790 046070 IF DR6 = 'CC' MOVE 'CC-1500-F' TO MC14 (J, K) GO TO MUMP. CM000095
00791 046080 IF DR6 = 'IC' MOVE 'IC-1500-F' TO MC14 (J, K) GO TO MUMP. CM000095
00792 046090 IF DR6 = 'EV' MOVE 'EVENT' TO MC14 (J, K) CM000095
00793 046100 MUMP. CM000095
00794 046110 MOVE HPAR TO MC2 (J, K) CM000095
00795 046130 GO TO RD-HK. CM000095

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00796 046140 MCCENO. CM000095
00797 046150 DISPLAY '4615' CM000095
00798 046160 CLOSE CFILF CM000095
00799 046170 GO TO RD-HK. CM000095
00800 046180 MCR2. CM000095
00801 046190 IF DR5A = '1' CM000095
00802 046200 MOVE '01' TO MC4 (J, K) CM000095
00803 046210 MOVE '02' TO MC6 (J, K) CM000095
00804 046220 MOVE '03' TO MC8 (J, K) CM000095
00805 046230 MOVE '04' TO MC10 (J, K) CM000095
00806 046240 GO TO MCR2A. CM000095
00807 047010 IF DR5A = '2' OR '3' CM000095
00808 047020 MOVE '21' TO MC4 (J, K) CM000095
00809 047030 MOVE '22' TO MC6 (J, K) CM000095
00810 047040 MOVE '23' TO MC8 (J, K) CM000095
00811 047050 MOVE '24' TO MC10 (J, K) CM000095
00812 047060 GO TO MCR2A. CM000095
00813 047070 IF DR5A = '4' CM000095
00814 047080 MOVE '41' TO MC4 (J, K) CM000095
00815 047090 MOVE '42' TO MC6 (J, K) CM000095
00816 047100 MOVE '43' TO MC8 (J, K) CM000095
00817 047110 MOVE '44' TO MC10 (J, K) CM000095
00818 047120 GO TO MCR2A. CM000095
00819 047130 IF DR5A = '5' CM000095
00820 047140 MOVE '61' TO MC4 (J, K) CM000095
00821 047150 MOVE '62' TO MC6 (J, K) CM000095
00822 047160 MOVE '63' TO MC8 (J, K) CM000095
00823 047170 MOVE '64' TO MC10 (J, K) CM000095
00824 047180 GO TO MCR2A. CM000095
00825 047190 DISPLAY '4719' DR5 GO TO RD-HK. CM000095
00826 047200 MCR2A. CM000095
00827 047210 OPEN INPUT BFILE. CM000095
00828 047220 MCR2B. CM000095
00829 047230 READ BFILE AT END GO TO MBEND. CM000095
00830 047240 IF HROUT NOT = B3 GO TO MCR2B. CM000095
00831 047250 IF B5 = 'MS01' CM000095
00832 048010 MOVE '0 MV' TO MC5 (J, K) CM000095
00833 049020 MOVE '4 MV' TO MC7 (J, K) CM000095
00834 049030 GO TO MCR2C. CM000095
00835 048040 IF B5 = 'MS02' OR 'MS03' OR 'MS04' CM000095
00836 048050 MOVE '0 MV' TO MC5 (J, K) CM000095
00837 048060 MOVE '4 MV' TO MC7 (J, K) CM000095
00838 048070 MOVE '8 MV' TO MC9 (J, K) CM000095
00839 048080 GO TO MCR2C. CM000095
00840 048090 IF B5 = 'MS05' OR 'MS06' OR 'MS07' OR 'MS08' OR 'MS09' CM000095
00841 048100 OR 'MS10' CM000095
00842 048110 MOVE '0 MV' TO MC5 (J, K) CM000095
00843 048120 MOVE '4 MV' TO MC7 (J, K) CM000095
00844 048130 MOVE '8 MV' TO MC9 (J, K) CM000095
00845 048140 MOVE '25 MV' TO MC11 (J, K) CM000095
00846 048150 GO TO MCR2C. CM000095
00847 048160 DISPLAY '4816' B5 GO TO MBEND. CM000095
00848 048170 MCR2C. CM000095
00849 048180 MOVE 'MV CALS' TO MC15 (J, K). CM000095
00850 048190 GO TO MCR10. CM000095
00851 048200 MBEND. CM000095
00852 049210 DISPLAY '4821' HROUT CM000095

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00853	048220	GO TO RD-HK.	CM000095
00854	050010	DD-ROUTE.	CM000095
00855	050020	IF HHR3 NOT = 0 GO TO RD-HK.	
00856	050030	MOVE 1 TO J.	
00857	050040	MOVE RHR45 TO K.	
00858	050050	IF RHR45 = 0 MOVE 100 TO K.	
00859	050070	IF RR7B = '0' OR '1' OR '2' OR '3' OR '4' OR '5' OR '6'	CM000095
00860	050080	OR '7' OR '8' OR '9' GO TO ODR1.	CM000095
00861	050090	GO TO DDR3.	CM000095
00862	050100	ODR1.	CM000095
00863	050110	IF RR7C = '0' OR '1' OR '2' OR '3' OR '4' OR '5' OR '6'	CM000095
00864	050120	OR '7' OR '8' OR '9' GO TO DDR2.	CM000095
00865	050130	DDR3.	CM000095
00866	050140	IF DR7 = 'IPC' MOVE 'IN PLACE CALS' TO OD16 (J, K)	CM000095
00867	050150	GO TO DDR9.	CM000095
00868	050160	IF DR7 = 'SPC' MOVE 'SPECIAL CALS' TO DD16 (J, K)	CM000095
00869	050170	GO TO DDR9.	CM000095
00870	050180	IF RR7B = 'R' AND RR7C = 'N' GO TO DDR4.	CM000095
00871	050190	DISPLAY '5019' DR7 GO TO RD-HK.	CM000095
00872	050200	DDR4.	CM000095
00873	050210	OPEN INPUT CFIL.	CM000095
00874	050220	DDR5.	CM000095
00875	050230	READ CFIL AT END GO TO DDCEND.	CM000095
00876	050240	IF C9 NOT = '0' GO TO DDR5.	
00877	050250	IF HPAR NOT = C5 GO TO ODR5.	CM000095
00878	051010	IF RR7A = '+'	CM000095
00879	051020	MOVE '26' TO D05 (J, K)	CM000095
00880	051030	MOVE '27' TO D07 (J, K)	CM000095
00881	051040	MOVE '28' TO D09 (J, K)	CM000095
00882	051050	MOVE '29' TO D011 (J, K)	CM000095
00883	051060	MOVE '30' TO D013 (J, K)	CM000095
00884	051070	GO TO DOR6.	CM000095
00885	051080	IF RR7A = '--'	CM000095
00886	051090	MOVE '26' TO D05 (J, K)	CM000095
00887	051100	MOVE '25' TO D07 (J, K)	CM000095
00888	051110	MOVE '24' TO D09 (J, K)	CM000095
00889	051120	MOVE '23' TO D011 (J, K)	CM000095
00890	051130	MOVE '22' TO D013 (J, K)	CM000095
00891	051140	MOVE 1 TO NEG-SW	CM000095
00892	051150	GO TO DOR6.	CM000095
00893	051160	DISPLAY '5116' DR7 GO TO DDCEND.	CM000095
00894	051170	DDR6.	CM000095
00895	051180	IF C10 = SPACE GO TO DDR7.	CM000095
00896	051190	MOVE C10 TO D06 (J, K)	CM000095
00897	051200	READ CFIL AT END GO TO DDCEND.	CM000095
00898	051210	MOVE C10 TO D08 (J, K)	CM000095
00899	051220	READ CFIL AT END GO TO DDCEND.	CM000095
00900	051230	MOVE C10 TO D010 (J, K)	CM000095
00901	051240	READ CFIL AT END GO TO DDCEND.	CM000095
00902	051250	MOVE C10 TO D012 (J, K)	CM000095
00903	052010	READ CFIL AT END GO TO DDCEND.	CM000095
00904	052020	MOVE C10 TO D014 (J, K)	CM000095
00905	052030	GO TO DDR8.	CM000095
00906	052040	DDR7.	CM000095
00907	052050	IF C11 = SPACE DISPLAY '5205' C7 GO TO DDCEND.	CM000095
00908	052060	MOVE C11 TO D06 (J, K).	CM000095
00909	052070	READ CFIL AT END GO TO DDCEND.	CM000095

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00910	052080	MOVE C11 TO D08 (J, K).	CM000095
00911	052090	READ CFILE AT ENO GO TO D0CEND.	CM000095
00912	052100	MOVE C11 TO D010 (J, K).	CM000095
00913	052110	READ CFILE AT ENO GO TO D0CEND.	CM000095
00914	052120	MOVE C11 TO D012 (J, K).	CM000095
00915	052130	READ CFILE AT ENO GO TO D0CEND.	CM000095
00916	052140	MOVE C11 TO D014 (J, K).	CM000095
00917	052150	DDR8.	CM000095
00918	052160	MOVE C11B TO D04 (J, K).	CM000095
00919	053110	CLOSE CFILE.	CM000095
00920	**052170	DDR9.	CM000095
00921	052180	IF NEG-SW = 1 MOVE 0 TO NEG-SW	CM000095
00922	052190	MOVE '-' TO D0SN (J, K).	CM000095
00923	053010	IF DR6 = 'CP' MOVE 'CELL PRESS' TO D015 (J, K) GO TO DDRX.	CM000095
00924	053020	IF DR6 = 'BA' MOVE 'BAROMETER' TO D015 (J, K) GO TO DDRX.	CM000095
00925	053030	IF DR6 = 'VR' MOVE 'VAC. REF.' TO D015 (J, K) GO TO DDRX.	CM000095
00926	053040	IF DR6 = 'RT' MOVE 'RT' TO D015 (J, K) GO TO DDRX.	CM000095
00927	053050	IF DR6 = 'CA' MOVE 'CA-1500-F' TO D015 (J, K) GO TO DDRX.	CM000095
00928	053060	IF DR6 = 'CC' MOVE 'CC-1500-F' TO D015 (J, K) GO TO DDRX.	CM000095
00929	053070	IF DR6 = 'IC' MOVE 'IC-1500-F' TO D015 (J, K) GO TO DDRX.	CM000095
00930	053080	IF DR6 = 'EV' MOVE 'EVENT' TO D015 (J, K).	CM000095
00931	053090	DDRX.	CM000095
00932	053100	MOVE HPAR TO D03 (J, K)	CM000095
00933	053120	GO TO RD-HK.	CM000095
00934	053130	DDCEND.	CM000095
00935	053140	DISPLAY '5314'	CM000095
00936	053150	CLOSE CFILE	CM000095
00937	053160	GO TO RD-HK.	CM000095
00938	054010	DDR2.	CM000095
00939	054020	IF RDR7B = 08 GO TO D0R2A.	CM000095
00940	054030	IF RDR7B = 16 GO TO D0R2B.	CM000095
00941	054040	IF RDR7B = 24 GO TO D0R2C.	CM000095
00942	054050	IF RDR7B = 32 GO TO D0R2D.	CM000095
00943	054060	IF RDR7B = 40 GO TO D0R2E.	CM000095
00944	054070	IF RDR7B = 80 GO TO D0R2F.	CM000095
00945	054080	DDR2Z.	CM000095
00946	054090	DISPLAY '5409' DR7 GO TO RD-HK.	CM000095
00947	054100	DDR2A.	CM000095
00948	054110	IF RR7A = '+'	CM000095
00949	054120	MOVE '2' TO D05 (J, K)	CM000095
00950	054130	MOVE '0 MV' TO D06 (J, K)	CM000095
00951	054140	MOVE '3' TO D07 (J, K)	CM000095
00952	054150	MOVE '8 MV' TO D08 (J, K)	CM000095
00953	054160	GO TO D0R20.	CM000095
00954	054170	IF RR7A = '-'	CM000095
00955	054180	MOVE '2' TO D05 (J, K)	CM000095
00956	054190	MOVE '0 MV' TO D06 (J, K)	CM000095
00957	054200	MOVE '1' TO D07 (J, K)	CM000095
00958	054210	MOVE '8 MV' TO D08 (J, K)	CM000095
00959	054220	GO TO D0R20.	CM000095
00960	054230	GO TO D0R2Z.	CM000095
00961	055010	DDR2B.	CM000095
00962	055020	IF RR7A = '+'	CM000095
00963	055030	MOVE '5' TO D05 (J, K)	CM000095
00964	055040	MOVE '0 MV' TO D06 (J, K)	CM000095
00965	055050	MOVE '6' TO D07 (J, K)	CM000095
00966	055060	MOVE '16 MV' TO D08 (J, K)	CM000095

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00967 055070 GO TO DDR20. CM000095
00968 055080 IF RR7A = '-' CM000095
00969 055090 MOVE '5' TO DD5 (J, K) CM000095
00970 055100 MOVE '0 MV' TO DD6 (J, K) CM000095
00971 055110 MOVE '4' TO DD7 (J, K) CM000095
00972 055120 MOVE '-16 MV' TO DD8 (J, K) CM000095
00973 055130 GO TO DDR20. CM000095
00974 055140 GO TO DDR22. CM000095
00975 055150 DDR2C. CM000095
00976 055160 IF RR7A = '+' CM000095
00977 055170 MOVE '8' TO DD5 (J, K) CM000095
00978 055180 MOVE '0 MV' TO DD6 (J, K) CM000095
00979 055190 MOVE '9' TO DD7 (J, K) CM000095
00980 055200 MOVE '24 MV' TO DD8 (J, K) CM000095
00981 055210 GO TO DDR20. CM000095
00982 055220 IF RR7A = '-' CM000095
00983 055230 MOVE '8' TO DD5 (J, K) CM000095
00984 055240 MOVE '0 MV' TO DD6 (J, K) CM000095
00985 055250 MOVE '7' TO DD7 (J, K) CM000095
00986 056010 MOVE '-24 MV' TO DD8 (J, K) CM000095
00987 056020 GO TO DDR20. CM000095
00988 056030 GO TO DDR22. CM000095
00989 056040 DDR2D. CM000095
00990 056050 IF RR7A = '+' CM000095
00991 056060 MOVE '11' TO DD5 (J, K) CM000095
00992 056070 MOVE '0 MV' TO DD6 (J, K) CM000095
00993 056080 MOVE '12' TO DD7 (J, K) CM000095
00994 056090 MOVE '32 MV' TO DD8 (J, K) CM000095
00995 056100 GO TO DDR20. CM000095
00996 056110 IF RR7A = '-' CM000095
00997 056120 MOVE '11' TO DD5 (J, K) CM000095
00998 056130 MOVE '0 MV' TO DD6 (J, K) CM000095
00999 056140 MOVE '10' TO DD7 (J, K) CM000095
01000 056150 MOVE '-32 MV' TO DD8 (J, K) CM000095
01001 056160 GO TO DDR20. CM000095
01002 056170 GO TO DDR22. CM000095
01003 056180 DDR2E. CM000095
01004 056190 IF RR7A = '+' CM000095
01005 056200 MOVE '14' TO DD5 (J, K) CM000095
01006 056210 MOVE '0 MV' TO DD6 (J, K) CM000095
01007 056220 MOVE '15' TO DD7 (J, K) CM000095
01008 056230 MOVE '40 MV' TO DD8 (J, K) CM000095
01009 056240 GO TO DDR20. CM000095
01010 057010 IF RR7A = '-' CM000095
01011 057020 MOVE '14' TO DD5 (J, K) CM000095
01012 057030 MOVE '0 MV' TO DD6 (J, K) CM000095
01013 057040 MOVE '13' TO DD7 (J, K) CM000095
01014 057050 MOVE '-40 MV' TO DD8 (J, K) CM000095
01015 057060 GO TO DDR20. CM000095
01016 057070 GO TO DDR22. CM000095
01017 057080 DDR2F. CM000095
01018 057090 IF RR7A = '+' CM000095
01019 057100 MOVE '17' TO DD5 (J, K) CM000095
01020 057110 MOVE '0 MV' TO DD6 (J, K) CM000095
01021 057120 MOVE '18' TO DD7 (J, K) CM000095
01022 057130 MOVE '80 MV' TO DD8 (J, K) CM000095
01023 057140 GO TO DDR20. CM000095

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01024 057150 . . IF RRTA = '-' . . . . . CM000095
01025 057160 . . . . . MOVE '17' TO O05 (J, K) . . . . . CM000095
01026 057170 . . . . . MOVE 'Q.MV' TO Q06 (J, K) . . . . . CM000095
01027 057180 . . . . . MOVE '16' TO D07 (J, K) . . . . . CM000095
01028 057190 . . . . . MOVE '-80 MV' TO D08 (J, K) . . . . . CM000095
01029 057200 . . . . . GO TO DDR20. . . . . CM000095
01030 057210 . . . . . GO TO DDR22. . . . . CM000095
01031 057220 DDR20. . . . . CM000095
01032 057230 . . . . . MOVE 'MV CALS' TO D016 (J, K). . . . . CM000095
01033 057240 . . . . . GO TO DDR9. . . . . CM000095
01034 058010 SR-ROUTE. . . . . CM000095
01035 058020 . . . . . IF HHR3 > 4 DISPLAY '5802' HROOUT GO TO RD-HK. . . . . CM000095
01036 058030 . . . . . IF RHR45 > 8 DISPLAY '5803' HROOUT GO TO RD-HK. . . . . CM000095
01037 058040 . . . . . MOVE HHR3 TO J. . . . . CM000095
01038 058050 . . . . . MOVE RHR45 TO K. . . . . CM000095
01039 058060 . . . . . IF DR8 = 'MVC' MOVE 'MV CALS' TO SR11 (J, K) GO TO SRR10. . . . . CM000095
01040 058070 . . . . . IF DR8 = 'IPC' MOVE 'IN PLACE CALS' TO SR11 (J, K) . . . . . CM000095
01041 058080 . . . . . GO TO SRR10. . . . . CM000095
01042 058090 . . . . . IF DR8 = 'SPC' MOVE 'SPECIAL CALS' TO SR11 (J, K) . . . . . CM000095
01043 058100 . . . . . GO TO SRR10. . . . . CM000095
01044 058110 . . . . . IF RDR88 NOT = 'RN' DISPLAY '5811' HROOUT GO TO RD-HK. . . . . CM000095
01045 058120 . . . . . OPEN INPUT CFILE. . . . . CM000095
01046 058130 SRR1. . . . . CM000095
01047 058140 . . . . . READ CFILE AT END GO TO SRREND. . . . . CM000095
01048 058150 . . . . . IF C9 NOT = '0' GO TO SRR1. . . . . CM000095
01049 058160 . . . . . IF HPAR NOT = C5 GO TO SRR1. . . . . CM000095
01050 058170 . . . . . IF C10 = SPACE GO TO SRR2. . . . . CM000095
01051 058180 . . . . . MOVE C10 TO SR5 (J, K) . . . . . CM000095
01052 058190 . . . . . READ CFILE AT END GO TO SRREND. . . . . CM000095
01053 058200 . . . . . MOVE C10 TO SR6 (J, K) . . . . . CM000095
01054 058210 . . . . . READ CFILE AT END GO TO SRREND. . . . . CM000095
01055 058220 . . . . . MOVE C10 TO SR7 (J, K) . . . . . CM000095
01056 058230 . . . . . READ CFILE AT END GO TO SRREND. . . . . CM000095
01057 058240 . . . . . MOVE C10 TO SR8 (J, K) . . . . . CM000095
01058 058250 . . . . . READ CFILE AT END GO TO SRREND. . . . . CM000095
01059 059010 . . . . . MOVE C10 TO SR9 (J, K) . . . . . CM000095
01060 059020 . . . . . GO TO SRR9. . . . . CM000095
01061 059030 SRR2. . . . . CM000095
01062 059040 . . . . . IF C11 = SPACE DISPLAY '5904' C7 GO TO RD-HK. . . . . CM000095
01063 059050 . . . . . MOVE C11 TO SR5 (J, K). . . . . CM000095
01064 059060 . . . . . READ CFILE AT END GO TO SRREND. . . . . CM000095
01065 059070 . . . . . MOVE C11 TO SR6 (J, K). . . . . CM000095
01066 059080 . . . . . READ CFILE AT END GO TO SRREND. . . . . CM000095
01067 059090 . . . . . MOVE C11 TO SR7 (J, K) . . . . . CM000095
01068 059100 . . . . . READ CFILE AT END GO TO SRREND. . . . . CM000095
01069 059110 . . . . . MOVE C11 TO SR8 (J, K). . . . . CM000095
01070 059120 . . . . . READ CFILE AT END GO TO SRREND. . . . . CM000095
01071 059130 . . . . . MOVE C11 TO SR9 (J, K). . . . . CM000095
01072 059140 SRR9. . . . . CM000095
01073 059150 . . . . . MOVE C11B TO SR4 (J, K) . . . . . CM000095
01074 060030 . . . . . CLOSE CFILE. . . . . CM000095
01075 **059160 . . . . . IF RDR8A = '-' MOVE '-' TO SR5N (J, K). . . . . CM000095
01076 059170 SRR10. . . . . CM000095
01077 059180 . . . . . IF DR6 = 'CP' MOVE 'CELL PRESS' TO SR10 (J, K) GO TO SRR55. . . . . CM000095
01078 059190 . . . . . IF DR6 = '8A' MOVE 'BAROMETER' TO SR10 (J, K) GO TO SRR55. . . . . CM000095
01079 059200 . . . . . IF DR6 = 'VR' MOVE 'VAC. REF.' TO SR10 (J, K) GO TO SRR55. . . . . CM000095
01080 059210 . . . . . IF DR6 = 'RT' MOVE 'RTT' TO SR10 (J, K) GO TO SRR55. . . . . CM000095

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01081 059220 IF OR6 = 'CA' MOVE 'CA-1500-F' TO SR10 (J, K) GO TO SRRSS. CM000095
01082 059230 IF OR6 = 'CC' MOVE 'CC-1500-F' TO SR10 (J, K) GO TO SRRSS. CM000095
01083 059240 IF OR6 = 'IC' MOVE 'IC-1500-F' TO SR10 (J, K) GO TO SRRSS. CM000095
01084 059250 IF OR6 = 'EV' MOVE 'EVENT' TO SR10 (J, K). CM000095
01085 060010 SRRSS. CM000095
01086 060020 MOVE HPAR TO SR3 (J, K). CM000095
01087 060040 GO TO RD-HK. CM000095
01088 060050 SRREND. CM000095
01089 060060 DISPLAY '6006' CM000095
01090 060070 CLOSE CFILE. CM000095
01091 060080 GO TO RD-HK. CM000095
01092 062010 HK-ENO. CM000095
01093 062020 CLOSE HOOK. CM000095
01094 062030 PERFORM WR-SC VARYING J FROM 1 BY 1 UNTIL J > JJ. CM000095
01095 062040 MOVE 28 TO JECT. GO TO WR-MT. CM000095
01096 062050 WR-SC. CM000095
01097 062060 IF JECT = 50 CM000095
01098 062061 WRITE LIT FROM SC-HO AFTER 0
01099 062070 WRITE LIT FROM HEADSMDS AFTER 2
01100 062080 MOVE 0 TO JECT. CM000095
01101 062100 MOVE SC1 (J) TO LSC1. CM000095
01102 062110 MOVE SC2 (J) TO LSC2. CM000095
01103 062120 MOVE SC3 (J) TO LSC3. CM000095
01104 062130 MOVE SC4 (J) TO LSC4. CM000095
01105 062140 MOVE SC5 (J) TO LSC5. CM000095
01106 062150 MOVE SC6 (J) TO LSC6. CM000095
01107 062160 MOVE SC7 (J) TO LSC7. CM000095
01108 062170 MOVE SC8 (J) TO LSC8. CM000095
01109 062180 MOVE SC9 (J) TO LSC9. CM000095
01110 062190 MOVE SC10 (J) TO LSC10. CM000095
01111 062200 WRITE LIT FROM SCLIST AFTER 2. CM000095
01112 062210 ADD 2 TO JECT. CM000095
01113 063010 WR-MT. MOVE 'TNO CHAN' TO SCMTD. CM000095
01114 063020 PERFORM WR-MT1 VARYING K FROM 1 BY 1 UNTIL K > 6
01115 063030 AFTER J FROM 1 BY 1 UNTIL J > 14.
01116 063040 GO TO WR-OS. CM000095
01117 063050 WR-MT1. CM000095
01118 063060 IF JECT = 28
01119 063061 PERFORM DO-HO
01120 063062 WRITE LIT FROM MT-HO AFTER 0
01121 063070 WRITE LIT FROM HEADSMDS AFTER 2
01122 063080 MOVE 0 TO JECT. CM000095
01123 063120 MOVE MT3 (K, J) TO LMT3. CM000095
01124 063130 MOVE MT4 (K, J) TO LMT4. CM000095
01125 063140 MOVE MT5 (K, J) TO LMT5. CM000095
01126 063150 MOVE MT6 (K, J) TO LMT6. CM000095
01127 063160 MOVE MT7 (K, J) TO LMT7. CM000095
01128 063170 MOVE MT8 (K, J) TO LMT8. CM000095
01129 063180 MOVE MT9 (K, J) TO LMT9. CM000095
01130 063190 MOVE MT10 (K, J) TO LMT10. CM000095
01131 063200 MOVE MT11 (K, J) TO LMT11. CM000095
01132 063210 IF K = 1 MOVE 'A' TO LMT1. CM000095
01133 063220 IF K = 2 MOVE 'B' TO LMT1. CM000095
01134 063230 IF K = 3 MOVE 'C' TO LMT1. CM000095
01135 063240 IF K = 4 MOVE 'D' TO LMT1. CM000095
01136 063250 IF K = 5 MOVE 'E' TO LMT1. CM000095
01137 064010 IF K = 6 MOVE 'F' TO LMT1. CM000095

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01138	064020	MOVE J TO LMT2	CM000095
01139	064030	IF J = 12 MOVE 'GATED T.' TO LMT3.	CM000095
01140	064040	IF J = 13 MOVE 'CONT. T.' TO LMT3.	CM000095
01141	064050	IF J = 14 MOVE 'VOICE' TO LMT3.	CM000095
01142	064060	ADD 2 TO JECT.	CM000095
01143	064070	WRITE LIT FROM MLIST AFTER 2.	CM000095
01144	065010	WR-OS.	CM000095
01145	065011	MOVE OSF TO FLX.	
01146	065020	MOVE 36 TO JECT MOVE ' OSNO CHAN' TO SCMT0.	
01147	065030	PERFORM WR-OS1 VARYING K FROM 1 BY 1 UNTIL K > 6	
01148	065040	AFTER J FROM 1 BY 1 UNTIL J > 36.	
01149	065050	GO TO WR-MC.	CM000095
01150	065060	WR-OS1.	CM000095
01151	065070	IF JECT = 36	
01152	065071	PERFORM DO-HO	
01153	065072	WRITE LIT FROM MT-HO AFTER 0	
01154	065080	WRITE LIT FROM HEADSMOS AFTER 2	
01155	065081	MOVE '0' TO JKT	
01156	065090	MOVE 0 TO JECT.	CM000095
01157	065100	IF K = 1 MOVE 'A' TO LOS1.	CM000095
01158	065110	IF K = 2 MOVE 'B' TO LOS1.	CM000095
01159	065120	IF K = 3 MOVE 'C' TO LOS1.	CM000095
01160	065130	IF K = 4 MOVE 'D' TO LOS1.	CM000095
01161	065140	IF K = 5 MOVE 'E' TO LOS1.	CM000095
01162	065150	IF K = 6 MOVE 'F' TO LOS1.	CM000095
01163	065160	MOVE J TO LOS2.	CM000095
01164	065170	MOVE OS3 (K, J) TO LOS3.	CM000095
01165	065180	IF J = 35 MOVE '1 HZ' TO LOS3.	
01166	065190	IF J = 36 MOVE '100 HZ' TO LOS3.	
01167	065200	MOVE OS4 (K, J) TO LOS4.	CM000095
01168	065210	MOVE OS5 (K, J) TO LOS5.	CM000095
01169	065220	MOVE OS6 (K, J) TO LOS6.	CM000095
01170	065230	MOVE OS7 (K, J) TO LOS7.	CM000095
01171	065240	MOVE OS8 (K, J) TO LOS8.	CM000095
01172	065250	MOVE OS9 (K, J) TO LOS9.	CM000095
01173	066010	MOVE OS10 (K, J) TO LOS10.	CM000095
01174	066020	MOVE OS11 (K, J) TO LOS11.	CM000095
01175	066030	ADD 1 TO JECT.	
01176	066040	WRITE LIT FROM OS1LIST AFTER JKT MOVE ' ' TO JKT.	
01177	066060	WR-MC.	CM000095
01178	066070	MOVE 50 TO JECT.	CM000095
01179	066080	MOVE 0 TO JJ.	CM000095
01180	066081	IF MSW1 = 1	
01181	066090	MOVE 1 TO J PERFORM WRMC1 VARYING K FROM 1 BY 1	CM000095
01182	066100	UNTIL K > 100 GO TO WR-MC2.	CM000095
01183	066110	IF MSW3 = 1 GO TO WR-MC3.	CM000095
01184	066120	GO TO WR-MC4.	CM000095
01185	066130	WR-MC2.	CM000095
01186	066140	IF MSW3 = 0 GO TO WR-MC4.	CM000095
01187	066150	IF MSW2 = 0 GO TO WR-MC4.	CM000095
01188	066160	MOVE 2 TO J.	CM000095
01189	066170	PERFORM WRMC1 VARYING K FROM 1 BY 1 UNTIL K > 100.	CM000095
01190	066180	WR-MC3.	CM000095
01191	066190	MOVE 3 TO J.	CM000095
01192	066200	PERFORM WRMC1 VARYING K FROM 1 BY 1 UNTIL K > 100.	CM000095
01193	066210	WR-MC4.	CM000095
01194	066220	IF MSW2 = 1 MOVE 2 TO J	CM000095

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01195	066230	PERFORM WRMC1 VARYING K FROM 1 BY 1 UNTIL K > 100.	CM000095
01196	066240	MOVE 24 TO JECT.	
01197	068050	GO TO WR-SR.	
01198	**067010	WRMC1.	CM000095
01199	067020	ADD 1 TO JJ.	CM000095
01200	067030	MOVE JJ TO LMC1.	CM000095
01201	067040	MOVE MC2 (J, K) TO LMC2.	CM000095
01202	067050	MOVE MC3 (J, K) TO LMC3.	CM000095
01203	067060	MOVE MC4 (J, K) TO LMC4.	CM000095
01204	067070	MOVE MC5 (J, K) TO LMC5.	CM000095
01205	067080	MOVE MC6 (J, K) TO LMC6.	CM000095
01206	067090	MOVE MC7 (J, K) TO LMC7.	CM000095
01207	067100	MOVE MC8 (J, K) TO LMC8.	CM000095
01208	067110	MOVE MC9 (J, K) TO LMC9.	CM000095
01209	067120	MOVE MC10 (J, K) TO LMC10.	CM000095
01210	067130	MOVE MC11 (J, K) TO LMC11.	CM000095
01211	067140	MOVE MC12 (J, K) TO LMC12.	CM000095
01212	067150	MOVE MC13 (J, K) TO LMC13.	CM000095
01213	067160	MOVE MC14 (J, K) TO LMC14.	CM000095
01214	067170	MOVE MC15 (J, K) TO LMC15.	CM000095
01215	067180	IF JECT = 50	CM000095
01216	067181	WRITE LIT FROM MC-HD AFTER 0	
01217	067190	WRITE LIT FROM HEADMCDD AFTER 2	
01218	067200	MOVE 0 TO JECT.	CM000095
01219	067210	ADD 2 TO JECT.	CM000095
01220	067220	WRITE LIT FROM MCLIST AFTER 2.	CM000095
01221	071010	WR-SR.	CM000095
01222	071011	MOVE SRF TO FIXR.	
01223	071020	MOVE ' REC CHAN' TO SCMT0.	
01224	071040	PERFORM WRSR1 VARYING K FROM 1 BY 1 UNTIL K > 4	
01225	071050	AFTER J FROM 1 BY 1 UNTIL J > 8.	
01226	071060	GO TO ASCEND.	CM000095
01227	071080	WRSR1.	CM000095
01228	071090	IF K = 1 MOVE 'A' TO LSR1.	
01229	071092	IF K = 2 MOVE 'B' TO LSR1.	
01230	071093	IF K = 3 MOVE 'C' TO LSR1.	
01231	071094	IF K = 4 MOVE 'D' TO LSR1.	
01232	071100	MOVE J TO LSR2.	CM000095
01233	071110	MOVE SR3 (K, J) TO LSR3.	CM000095
01234	071120	MOVE SR4 (K, J) TO LSR4.	CM000095
01235	071130	MOVE SR5 (K, J) TO LSR5.	CM000095
01236	071140	MOVE SR6 (K, J) TO LSR6.	CM000095
01237	071150	MOVE SR7 (K, J) TO LSR7.	CM000095
01238	071160	MOVE SR8 (K, J) TO LSR8.	CM000095
01239	071170	MOVE SR9 (K, J) TO LSR9.	CM000095
01240	071180	MOVE SR10 (K, J) TO LSR10.	CM000095
01241	071190	MOVE SR11 (K, J) TO LSR11.	CM000095
01242	071200	IF SRSN (K, J) = '-' MOVE ' ' TO FILLERA FILLERB FILLER	CM000095
01243	071210	FILLER0 FILLERE ELSE MOVE SPACE TO FILLERA FILLER.	CM000095
01244	071220	FILLERC FILLER0 FILLERE.	CM000095
01245	071230	IF JECT = 24	CM000095
01246	071231	WRITE LIT FROM MC-HD AFTER 0	
01247	071240	WRITE LIT FROM HEADSMDS AFTER 2	
01248	071250	MOVE 0 TO JECT.	CM000095
01249	072010	ADD 1 TO JECT.	CM000095
01250	072020	WRITE LIT FROM SRLIST AFTER 2.	CM000095
01251	072030	ASCEND.	CM000095

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01252	**069020	MOVE 1 TO J... MOVE ' ' CHAN ' ' TO MCDR. MOVE 25 TO JECT.	CM000095
01253	069030	PERFORM WROD1 VARYING K FROM 1 BY 1 UNTIL K > 100.	CM000095
01254	069070	GO TO QUIT.	
01255	069100	WROD1.	CM000095
01256	069110	MOVE K TO L002.	
01257	069120	MOVE 0 TO LD01.	
01258	**069150	MOVE DD3 (J, K) TO LDD3.	CM000095
01259	069160	MOVE DD4 (J, K) TO LDD4.	CM000095
01260	069170	MOVE DD5 (J, K) TO LDD5.	CM000095
01261	069180	MOVE DD6 (J, K) TO LDD6.	CM000095
01262	069190	MOVE DD7 (J, K) TO LDD7.	CM000095
01263	069200	MOVE DD8 (J, K) TO LDD8.	CM000095
01264	069210	MOVE DD9 (J, K) TO LDD9.	CM000095
01265	069220	MOVE DD10 (J, K) TO LDD10.	CM000095
01266	069230	MOVE DD11 (J, K) TO LDD11.	CM000095
01267	069240	MOVE DD12 (J, K) TO LDD12.	CM000095
01268	069250	MOVE DD13 (J, K) TO LDD13.	CM000095
01269	070010	MOVE DD14 (J, K) TO LDD14.	CM000095
01270	070020	MOVE DD15 (J, K) TO LDD15.	CM000095
01271	070030	MOVE DD16 (J, K) TO LDD16.	CM000095
01272	070040	IF DD5N (J, K) = '-' MOVE '-' TO FILLER1 FILLER2 FILLER3	CM000095
01273	070050	FILLER4 FILLER5 ELSE MOVE SPACE TO FILLER1 FILLER2	CM000095
01274	070060	FILLER3 FILLER4 FILLER5.	CM000095
01275	070070	IF JECT = 25	CM000095
01276	070071	WRITE LIT FROM DDAS-HD AFTER 0	
01277	070080	WRITE LIT FROM HEADMCDR AFTER 2	
01278	070090	MOVE 0 TO JECT.	CM000095
01279	070100	ADD 1 TO JECT.	CM000095
01280	070110	WRITE LIT FROM DDLIST AFTER 2.	CM000095
01281	070111	QUIT.	
01282	072040	CLOSE LIST.	CM000095
01283	072060	STOP RUN.	CM000095
01284	073010	SPACE-TB.	CM000095
01285	073110	MOVE 1 TO J.	
01286	073120	PERFORM SPC-00 VARYING K FROM 1 BY 1 UNTIL K > 100.	
01287	**073020	PERFORM SPC-SC VARYING J FROM 1 BY 1 UNTIL J = 51.	CM000095
01288	073030	PERFORM SPC-MT VARYING K FROM 1 BY 1 UNTIL K > 14 AFTER	CM000095
01289	073040	J FROM 1 BY 1 UNTIL J > 6.	CM000095
01290	073050	PERFORM SPC-OS VARYING K FROM 1 BY 1 UNTIL K > 36 AFTER	CM000095
01291	073060	J FROM 1 BY 1 UNTIL J > 6.	CM000095
01292	073070	PERFORM SPC-MC VARYING K FROM 1 BY 1 UNTIL K > 100 AFTER	CM000095
01293	073080	J FROM 1 BY 1 UNTIL J > 3.	CM000095
01294	073150	PERFORM SPC-SR VARYING K FROM 1 BY 1 UNTIL K > 8	CM000095
01295	073160	AFTER J FROM 1 BY 1 UNTIL J = 5.	CM000095
01296	074010	SPC-SC.	CM000095
01297	074020	MOVE SPACE TO SC1 (J), SC2 (J), SC3 (J), SC4 (J), SC5 (J),	CM000095
01298	074030	SC6 (J), SC7 (J), SC8 (J), SC9 (J), SC10 (J).	CM000095
01299	074040	SPC-MT.	CM000095
01300	074050	MOVE SPACE TO MT3 (J, K), MT4 (J, K).	CM000095
01301	074060	MT5 (J, K), MT6 (J, K), MT7 (J, K), MT8 (J, K),	CM000095
01302	074070	MT9 (J, K), MT10 (J, K), MT11 (J, K).	CM000095
01303	074080	SPC-OS.	CM000095
01304	074090	MOVE SPACE TO OS1 (J, K), OS2 (J, K), OS3 (J, K), OS4 (J, K),	CM000095
01305	074100	OS5 (J, K), OS6 (J, K), OS7 (J, K), OS8 (J, K),	CM000095
01306	074110	OS9 (J, K), OS10 (J, K), OS11 (J, K).	CM000095
01307	074120	SPC-MC.	CM000095
01308	074130	MOVE SPACE TO MC1 (J, K), MC2 (J, K), MC3 (J, K),	CM000095

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01309	074140	MC4 (J, K), MC5 (J, K), MC6 (J, K), MC7 (J, K)	CM000095
01310	074150	MC8 (J, K), MC9 (J, K), MC10 (J, K), MC11 (J, K),	CM000095
01311	074160	MC12 (J, K), MC13 (J, K), MC14 (J, K), MC15 (J, K),	CM000095
01312	074170	MC16 (J, K).	CM000095
01313	074200	SPC-00.	CM000095
01314	074210	MOVE SPACE TO OD1 (J, K), OD2 (J, K), OD3 (J, K) OD4 (J, K)	CM000095
01315	074220	OD5 (J, K), DD6 (J, K), DD7 (J, K), DD8 (J, K)	CM000095
01316	074230	DD9 (J, K), DD10 (J, K), DD11 (J, K), DD12 (J, K)	CM000095
01317	074240	DD13 (J, K), DD14 (J, K), DD15 (J, K), DD16 (J, K)	CM000095
01318	074250	OOSN (J, K).	CM000095
01319	075030	SPC-SR.	CM000095
01320	075040	MOVE SPACE TO SR1 (J, K), SR2 (J, K), SR3 (J, K), SR4 (J, K),	CM000095
01321	075050	SR5 (J, K), SR6 (J, K), SR7 (J, K), SR8 (J, K),	CM000095
01322	075060	SR9 (J, K), SR10 (J, K), SR11 (J, K), SRSN (J, K).	CM000095
01323	076010	DR-BF.	CM000095
01324	076020	OPEN INPUT BFILE. MOVE 0 TO J.	CM000095
01325	076030	RD-BF.	CM000095
01326	076040	READ BFILE AT END GO TO BEND.	CM000095
01327	076050	IF B3A NOT = 'SC' GO TO RD-BF.	CM000095
01328	076060	ADD 1 TO J.	CM000095
01329	076070	IF J > 50 DISPLAY 'SC-TABLE TOO SMALL' B3A B3B GO TO BEND.	CM000095
01330	076080	MOVE B3B TO SC1 (J).	CM000095
01331	076090	GO TO RD-BF.	CM000095
01332	076100	BEND.	CM000095
01333	076110	MOVE J TO JJ.	CM000095
01334	076120	CLOSE BFILE.	CM000095
01335	077010	00-U.	CM000095
01336	077020	MOVE 0 TO J.	CM000095
01337	077030	MOVE 1 TO K.	CM000095
01338	077040	00-J.	CM000095
01339	077050	MOVE J TO MC16 (1, K)	CM000095
01340	077060	ADD 1 TO J ADD 1 TO K.	CM000095
01341	077070	IF J = 100 GO TO U-TO.	CM000095
01342	077080	GO TO DO-J.	CM000095
01343	077090	U-TO.	CM000095
01344	077100	MOVE 400 TO J	CM000095
01345	077110	MOVE 1 TO K.	CM000095
01346	077120	TO-TWO.	CM000095
01347	077130	MOVE J TO MC16 (2, K).	CM000095
01348	077140	ADD 1 TO J	CM000095
01349	077150	ADD 1 TO K	CM000095
01350	077160	IF J = 500 GO TO DO-MOR.	CM000095
01351	077170	GO TO TO-TWO.	CM000095
01352	077180	DO-MOR.	CM000095
01353	077190	MOVE 100 TO J.	CM000095
01354	077200	MOVE 1 TO K.	CM000095
01355	077210	B4-U.	CM000095
01356	077220	MOVE J TO MC16 (3, K)	CM000095
01357	077230	ADD 1 TO J.	CM000095
01358	077240	ADD 1 TO K.	CM000095
01359	077250	IF J = 200 GO TO ALL-DO.	CM000095
01360	078010	GO TO B4-U.	CM000095
01361	078020	ALL-DO.	CM000095
01362	078030	EXIT.	CM000095
01363	079010	DO-MO.	CM000095
01364	079020	IF K = 1 MOVE 'A' TO FLP.	CM000095
01365	079030	IF K = 2 MOVE 'B' TO FLP.	CM000095

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01366	079040	IF K = 3 MOVE 'C' TO FLP.
01367	079050	IF K = 4 MOVE 'D' TO FLP.
01368	079060	IF K = 5 MOVE 'E' TO FLP.
01369	079070	IF K = 6 MOVE 'F' TO FLP.

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00001	001010	IDENTIFICATION DIVISION.	CM000048
00002	001020	PROGRAM-ID. 'CM000048'.	CM000048
00003	001030	AUTHOR. JACK ROSE.	CM000048
00004	001040	INSTALLATION. ARO INC TULLAHOA TENN.	CM000048
00005	001050	DATE-WRITTEN. SEPTEMBER 1967.	CM000048
00006	001060	DATE-COMPILED. DEC 14, 1968	CM000048
00007	001070	SECURITY.	CM000048
00008	001080	REMARKS. THIS PROGRAM CREATES A GILMORE TRANSDUCER	CM000048
00009	001090	FILE TO BE USED BY RTF AND LRF INSTRUMENT BOOKS.	CM000048
00010	001110	ENVIRONMENT DIVISION.	CM000048
00011	001120	CONFIGURATION SECTION.	CM000048
00012	001130	SOURCE-COMPUTER. IBM-360 H50.	CM000048
00013	001140	OBJECT-COMPUTER. IBM-360 H50.	CM000048
00014	001150	INPUT-OUTPUT SECTION.	CM000048
00015	001160	FILE-CONTROL.	CM000048
00016	001170	SELECT GIL-IN ASSIGN 'G001' UTILITY.	CM000048
00017	001180	SELECT GIL-OT ASSIGN 'G002' UTILITY.	CM000048
00018	001190	DATA DIVISION.	CM000048
00019	001200	FILE SECTION.	CM000048
00020	001210	FD GIL-IN RECORDING F BLOCK 10 RECORDS RECORD 133	CM000048
00021	001220	LABEL RECORDS STANDARD DATA RECORD GIN.	CM000048
00022	001230	01 GIN.	CM000048
00023	001240	02 GINN PICTURE X OCCURS 133.	CM000048
00024	002010	FD GIL-OT RECORDING F BLOCK 1 RECORDS RECORD 747	CM000048
00025	002020	LABEL RECORDS STANDARD DATA RECORDS ARE GOT NEWG.	CM000048
00026	002030	01 GOT.	CM000048
00027	002040	02 GPURSPEC PICTURE X(10).	CM000048
00028	002050	02 GINS-NO PICTURE X(16).	CM000048
00029	002060	02 GDAT-REC PICTURE 9(6).	CM000048
00030	002070	02 GMAN PICTURE X(12).	CM000048
00031	002080	02 GMATE PICTURE X(20).	CM000048
00032	002090	02 GRANGE PICTURE X(5).	CM000048
00033	002100	02 GRANGE-U PICTURE X(12).	CM000048
00034	002110	02 GPDS-ICON PICTURE XX.	CM000048
00035	002120	02 GMODEL PICTURE X(12).	CM000048
00036	002130	02 GNEG-ICON PICTURE XX.	CM000048
00037	002140	02 GSERIAL PICTURE X(10).	CM000048
00038	002150	02 GPDS-ICON PICTURE XX.	CM000048
00039	002160	02 GFACILITY PICTURE XXXX.	CM000048
00040	002170	02 GNEG-ICON PICTURE XX.	CM000048
00041	002180	02 GPURCHASED PICTURE X(10).	CM000048
00042	002190	02 GSHIELD PICTURE XX.	CM000048
00043	002200	02 GCAL-RUN PICTURE XXX.	CM000048
00044	002210	02 GDAT-CAL PICTURE 9(6).	CM000048
00045	002220	02 GEXCITATION PICTURE S99V99.	CM000048
00046	002230	02 GTEMP PICTURE S9(6).	CM000048
00047	002240	02 GBAROMETRIC PICTURE S99V99.	CM000048
00048	002250	02 GINPUTRES PICTURE S9(5)V9.	CM000048
00049	003010	02 GOUTPUTRES PICTURE S9(5)V9.	CM000048
00050	003020	02 GINSUL-RES PICTURE S9(5)V9.	CM000048
00051	003030	02 GTERM-LINEARITY.	CM000048
00052	003040	03 MV0A PICTURE S9(7)V999.	CM000048
00053	003050	03 MV0B PICTURE S9(8)V99.	CM000048
00054	003060	03 MV25A PICTURE S9(7)V999.	CM000048

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00055	003070	03	MV25B	PICTURE S9(8)V99.	CM000048
00056	003080	03	MV50A	PICTURE S9(7)V999.	CM000048
00057	003090	03	MV50B	PICTURE S9(8)V99.	CM000048
00058	003100	03	MV75A	PICTURE S9(7)V999.	CM000048
00059	003110	03	MV75B	PICTURE S9(8)V99.	CM000048
00060	003120	03	MV100A	PICTURE S9(7)V999.	CM000048
00061	003130	03	MV100B	PICTURE S9(8)V99.	CM000048
00062	003140	03	MV75AA	PICTURE S9(7)V999.	CM000048
00063	003150	03	MV75BB	PICTURE S9(8)V99.	CM000048
00064	003160	03	MV50AA	PICTURE S9(7)V999.	CM000048
00065	003170	03	MV50BB	PICTURE S9(8)V99.	CM000048
00066	003180	03	MV25AA	PICTURE S9(7)V999.	CM000048
00067	003190	03	MV25BB	PICTURE S9(8)V99.	CM000048
00068	003200	03	MV0AA	PICTURE S9(7)V999.	CM000048
00069	003210	03	MV0BB	PICTURE S9(8)V99.	CM000048
00070	004010	02	REPEATABILITY.		
00071	004020	03	PSI1	PICTURE S9(4)V99.	CM000048
00072	004030	03	PSI1U	PICTURE X.	CM000048
00073	004040	03	PSIMV1	PICTURE S999V999.	CM000048
00074	004050	03	PSI2	PICTURE S9(4)V99.	CM000048
00075	004060	03	PSI2U	PICTURE X.	CM000048
00076	004070	03	PSIMV2	PICTURE S999V999.	CM000048
00077	004080	03	PSI3	PICTURE S9(4)V99.	CM000048
00078	004090	03	PSI3U	PICTURE X.	CM000048
00079	004100	03	PSIMV3	PICTURE S999V999.	CM000048
00080	004110	03	PSI4	PICTURE S999V999.	CM000048
00081	004120	03	PSI4U	PICTURE X.	CM000048
00082	004130	03	PSIMV4	PICTURE S999V999.	CM000048
00083	004140	03	PSI5	PICTURE S999V999.	CM000048
00084	004150	03	PSI5U	PICTURE X.	CM000048
00085	004160	03	PSIMV5	PICTURE S999V999.	CM000048
00086	004170	03	PSI6	PICTURE S999V999.	CM000048
00087	004180	03	PSI6U	PICTURE X.	CM000048
00088	004190	03	PSIMV6	PICTURE S999V999.	CM000048
00089	004200	03	PSI7	PICTURE S999V999.	CM000048
00090	004210	03	PSI7U	PICTURE X.	CM000048
00091	004220	03	PSIMV7	PICTURE S999V999.	CM000048
00092	005010	02	GRCAL-TYP	PICTURE XXX.	CM000048
00093	005020	02	GRCAL-SN	PICTURE XXX.	CM000048
00094	005030	02	GOUT-AT	PICTURE S999V999.	CM000048
00095	005040	02	GOUTPSIA	PICTURE S999V999.	CM000048
00096	005050	02	GR-CALAC.		CM000048
00097	005060	03	CALACR1	PICTURE XX.	CM000048
00098	005070	03	CALACR2	PICTURE XX.	CM000048
00099	005080	02	GUNBALANCE	PICTURE S999V999.	CM000048
00100	005090	02	GUNBMV0	PICTURE X.	CM000048
00101	005100	02	GRCAL-TKN	PICTURE S999V999.	CM000048
00102	005110	02	GTKN-PSIA	PICTURE X.	CM000048
00103	005120	02	GFS-SEN	PICTURE S999V999.	CM000048
00104	005130	02	GMAX-N-LIN	PICTURE S999V999.	CM000048
00105	005140	02	GMAX-HYST	PICTURE S999V999.	CM000048
00106	005150	02	GMAX-V-REPT	PICTURE S999V999.	CM000048
00107	005160	02	G CORR-P	PICTURE X.	CM000048
00108	005170	02	G-RNO.		CM000048
00109	005180	03	G-RNO1	PICTURE S9999V999.	CM000048
00110	005190	03	G-RNO2	PICTURE S999999V999.	CM000048
00111	005190	03	G-RNO3	PICTURE S999999V999.	CM000048

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00112	005200	02	G-RN1.		CM000048
00113	005210	03	G-RN11	PICTURE S9(5)V999.	CM000048
00114	005220	03	G-RN12	PICTURE S9(5)V999.	CM000048
00115	005230	03	G-RN13	PICTURE S9(5)V999.	CM000048
00116	005240	03	G-RN14	PICTURE S9(6)V999.	CM000048
00117	006010	02	G-RN2.		CM000048
00118	006020	03	G-RN21	PICTURE S9(5)V999.	CM000048
00119	006030	03	G-RN22	PICTURE S9(5)V999.	CM000048
00120	006040	03	G-RN23	PICTURE S9(5)V999.	CM000048
00121	006050	03	G-RN24	PICTURE S9(6)V999.	CM000048
00122	006060	02	G-RN3.		CM000048
00123	006070	03	G-RN31	PICTURE S9(5)V999.	CM000048
00124	006080	03	G-RN32	PICTURE S9(5)V999.	CM000048
00125	006090	03	G-RN33	PICTURE S9(5)V999.	CM000048
00126	006100	03	G-RN34	PICTURE S9(6)V999.	CM000048
00127	006110	02	G-RN4.		CM000048
00128	006120	03	G-RN41	PICTURE S9(5)V999.	CM000048
00129	006130	03	G-RN42	PICTURE S9(5)V999.	CM000048
00130	006140	03	G-RN43	PICTURE S9(5)V999.	CM000048
00131	006150	03	G-RN44	PICTURE S9(6)V999.	CM000048
00132	006160	02	G-RNOL.		CM000048
00133	006170	03	G-RNL1	PICTURE S9(5)V99.	CM000048
00134	006180	03	G-RNL2	PICTURE S9(7)V999.	CM000048
00135	006190	03	G-RNL3	PICTURE S9(5)V99.	CM000048
00136	006200	02	GPS-DATE	PICTURE 9(6).	CM000048
00137	006210	02	GOP-AT	PICTURE S999V99.	CM000048
00138	006220	02	GOP-PSIA	PICTURE S999V999.	CM000048
00139	006230	02	GOP-UNB	PICTURE S999V999.	CM000048
00140	006240	02	GOP-FSS	PICTURE S999V999.	CM000048
00141	006250	02	BMAX-N-LIN	PICTURE S999V99.	
00142	007010	02	BMAX-HYST	PICTURE S9999V999.	CM000048
00143	007020	02	BMAX-N-REPT	PICTURE S999V99.	CM000048
00144	007030	02	BCLEANFOR	PICTURE X(20).	CM000048
00145	007040	02	BCALIBAT1	PICTURE 9(6).	CM000048
00146	007050	02	BCALIBAT2	PICTURE 9(6).	CM000048
00147	007051	02	FILLERL	PICTURE X.	CM000048
00148	007060	01	NEWG.		CM000048
00149	007070	02	GIL	PICTURE X OCCURS 747.	CM000048
00150	007090		WORKING-STORAGE SECTION.		CM000048
00151	007100	77	A	PICTURE 9999 VALUE 0.	CM000048
00152	007110	77	B	PICTURE 9999 VALUE 0.	CM000048
00153	007120	77	C	PICTURE 9999 VALUE 0.	CM000048
00154	007130	77	D	PICTURE 9999 VALUE 0.	CM000048
00155	007140	77	H-SW	PICTURE 9 VALUE 0.	CM000048
00156	007150	77	N-SW	PICTURE 9 VALUE 0.	CM000048
00157	008010	01	HOLD-GIL.		CM000048
00158	008020	02	GIL-REC	OCCURS 58.	CM000048
00159	008030	03	G	OCCURS 133 PICTURE X.	CM000048
00160	009010		PROCEDURE DIVISION.		CM000048
00161	009020		OPEN INPUT GIL-IN	OUTPUT GIL-OT.	CM000048
00162	009021		MOVE SPACE TO FILLERL.		CM000048
00163	009030		FIRS.		CM000048
00164	009040		MOVE 0 TO A		CM000048
00165	009050		PERFORM READ-GILMORE 58 TIMES.		CM000048
00166	009060		MOVE 6 TO A. MOVE 70 TO B. MOVE 1 TO C.		CM000048
00167	009070		PERFORM MOVE-DATA 10 TIMES.		CM000048
00168	009080		ADD 2 TO A. MOVE 28 TO B.		CM000048

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00169	009090	PERFORM MOVE-DATA 16 TIMES.	CM000048
00170	009100	MOVE 61 TO B.	CM000048
00171	009110	PERFORM MAKE-NUMERIC THRU MOVE-DATA 2 TIMES	CM000048
00172	009120	MOVE 64 TO B.	CM000048
00173	009130	PERFORM MAKE-NUMERIC THRU MOVE-DATA 2 TIMES	CM000048
00174	009140	MOVE 67 TO B.	CM000048
00175	009150	PERFORM MAKE-NUMERIC THRU MOVE-DATA 2 TIMES	CM000048
00176	009160	ADD 1 TO A.	CM000048
00177	009170	MOVE 23 TO B.	CM000048
00178	009180	PERFORM MOVE-DATA 12 TIMES.	CM000048
00179	009190	MOVE 64 TO B.	CM000048
00180	009200	PERFORM MOVE-DATA 20 TIMES.	CM000048
00181	009210	ADD 1 TO A. MOVE 16 TO B.	CM000048
00182	009220	PERFORM MOVE-DATA 5 TIMES.	CM000048
00183	009230	MOVE 26 TO B.	CM000048
00184	009240	PERFORM MOVE-DATA 12 TIMES.	CM000048
00185	010010 Z.	MOVE 77 TO B.	CM000048
00186	010020	PERFORM MOVE-DATA. ADD 5 TO B. PERFORM MOVE-DATA.	CM000048
00187	010030 Y.	ADD 1 TO A. MOVE 23 TO B.	CM000048
00188	010040	PERFORM MOVE-DATA 12 TIMES.	CM000048
00189	010060	PERFORM Z.	CM000048
00190	010090	ADD 1 TO A	CM000048
00191	010100	SUBTRACT 60 FROM B.	CM000048
00192	010110	PERFORM MOVE-DATA 10 TIMES.	CM000048
00193	010120	PERFORM Z.	CM000048
00194	010130	ADD 1 TO A. MOVE 34 TO B.	CM000048
00195	010140	PERFORM MOVE-DATA 4 TIMES.	CM000048
00196	010150	PERFORM Z.	CM000048
00197	010160	ADD 1 TO A. MOVE 32 TO B.	CM000048
00198	010170	PERFORM MOVE-DATA 10 TIMES.	CM000048
00199	010180	PERFORM Z.	CM000048
00200	010190	ADD 2 TO A. MOVE 50 TO B.	CM000048
00201	010200	PERFORM MOVE-DATA 3 TIMES.	CM000048
00202	010210	ADD 1 TO A. MOVE 42 TO B.	CM000048
00203	010220 NN.	PERFORM MAKE-NUMERIC THRU MOVE-DATA 2 TIMES ADD 1 TO B.	CM000048
00204	010230	PERFORM MAKE-NUMERIC THRU MOVE-DATA 2 TIMES ADD 1 TO B.	CM000048
00205	010240	PERFORM MAKE-NUMERIC THRU MOVE-DATA 2 TIMES.	CM000048
00206	011010 OO.	MOVE 17 TO A. MOVE 21 TO B.	CM000048
00207	011020	PERFORM MAKE-NEG THRU MOVE-DATA 2 TIMES.	CM000048
00208	011030	MOVE 24 TO B.	CM000048
00209	011040	PERFORM MAKE-NUMERIC THRU MOVE-DATA 2 TIMES.	CM000048
00210	011050	IF M-SW = 1 SUBTRACT GEXCITATION FROM 0 GIVING GEXCITATION	CM000048
00211	011060	MOVE 0 TO M-SW. MOVE 45 TO B.	CM000048
00212	011070	PERFORM MAKE-NEG THRU MOVE-DATA 6 TIMES.	CM000048
00213	011080	IF M-SW = 1 SUBTRACT GTEMP FROM 0 GIVING GTEMP	CM000048
00214	011090	MOVE 0 TO M-SW. MOVE 74 TO B.	CM000048
00215	011100	PERFORM MAKE-NEG THRU MOVE-DATA 2 TIMES.	CM000048
00216	011110	ADD 1 TO B.	CM000048
00217	011120	PERFORM MAKE-NUMERIC THRU MOVE-DATA 2 TIMES.	CM000048
00218	011130	IF M-SW = 1 MOVE 0 TO M-SW	CM000048
00219	011140	SUBTRACT GBAROMETRIC FROM 0 GIVING GBAROMETRIC.	CM000048
00220	011150	MOVE 21 TO A. MOVE 25 TO B.	CM000048
00221	011160 W.	PERFORM MAKE-NEG THRU MOVE-DATA 5 TIMES.	CM000048
00222	011170	ADD 1 TO B	CM000048
00223	011180	PERFORM MAKE-NUMERIC THRU MOVE-DATA.	CM000048
00224	011190 U.	IF M-SW = 1 MOVE 0 TO M-SW	CM000048
00225	011200	SUBTRACT GINPUTRES FROM 0 GIVING GINPUTRES.	CM000048

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00226	011210	MOVE 22 TO A MOVE 26 TO B.	CM000048
00227	011220	PERFJRM W.	CM000048
00228	011230	IF M-SW = 1 MOVE 0 TO M-SW	CM000048
00229	011240	SUBTRACT GOUTPUTRES FROM 0 GIVING GOUTPUTRES.	CM000048
00230	012010	ADD 1 TO A MOVE 30 TO B.	CM000048
00231	012020	PERFORM W.	CM000048
00232	012030	IF M-SW = 1 SUBTRACT 1 FROM M-SW GIVING M-SW	CM000048
00233	012040	MULTIPLY GINSUL-RES BY -1 GIVING GINSUL-RES.	CM000048
00234	012050	MOVE 25 TO A. MOVE 59 TO B.	CM000048
00235	012060 V.	PERFORM MAKE-NEG THRU MOVE-DATA 7 TIMES.	CM000048
00236	012070	ADD 1 TO B.	CM000048
00237	012080	PERFORM MAKE-NUMERIC THRU MOVE-DATA 3 TIMES.	CM000048
00238	012090 S.	IF M-SW = 1 MOVE 0 TO M-SW	CM000048
00239	012100	SUBTRACT MVOA FROM 0 GIVING MVOA.	CM000048
00240	012110 T.	PERFORM MAKE-NEG THRU MOVE-DATA 8 TIMES.	CM000048
00241	012120	ADD 1 TO B.	CM000048
00242	012130	PERFJRM MAKE-NUMERIC THRU MOVE-DATA 2 TIMES.	CM000048
00243	012140 R.	IF M-SW = 1 MOVE 0 TO M-SW	CM000048
00244	012150	MULTIPLY MVOB BY -1 GIVING MVOB.	CM000048
00245	012160	MOVE 26 TO A. MOVE 59 TO B.	CM000048
00246	012170	PERFORM V.	CM000048
00247	012180	IF M-SW = 1 MOVE 0 TO M-SW	CM000048
00248	012190	MULTIPLY MV25A BY -1 GIVING MV25A.	CM000048
00249	012200	PERFORM T.	CM000048
00250	012210	IF M-SW = 1 MOVE 0 TO M-SW	CM000048
00251	012220	SUBTRACT MV25B FROM 0 GIVING MV25B.	CM000048
00252	012230	MOVE 27 TO A.	CM000048
00253	012240	MOVE 9 TO B.	CM000048
00254	013010	ADD C, 140 GIVING D.	CM000048
00255	013020 Q.	PERFORM MAKE-NEG THRU MOVE-DATA 4 TIMES	CM000048
00256	013030	ADD 1 TO B.	CM000048
00257	013040	PERFORM MAKE-NUMERIC THRU MOVE-DATA 2 TIMES.	CM000048
00258	013050 P.	IF N-SW = 1 MOVE 0 TO N-SW	CM000048
00259	013060	SUBTRACT PS11 FROM 0 GIVING PS11.	CM000048
00260	013070 O.	MOVE 20 TO B.	CM000048
00261	013080	PERFORM MOVE-DATA.	CM000048
00262	013090	PERFORM MAKE-NEG THRU MOVE-DATA 3 TIMES.	CM000048
00263	013100	ADD 1 TO B.	CM000048
00264	013110	PERFORM MAKE-NUMERIC THRU MOVE-DATA 3 TIMES.	CM000048
00265	013120 N.	IF N-SW = 1 MOVE 0 TO N-SW	CM000048
00266	013130	SUBTRACT PSIMV1 FROM 0 GIVING PSIMV1.	CM000048
00267	013140	MOVE 59 TO B.	CM000048
00268	013150	PERFORM V.	CM000048
00269	013160	IF M-SW = 1 MOVE 0 TO M-SW	CM000048
00270	013170	MULTIPLY MV50A BY -1 GIVING MV50A.	CM000048
00271	013180	PERFORM T.	CM000048
00272	013190	IF M-SW = 1 MOVE 0 TO M-SW	CM000048
00273	013200	MULTIPLY MV50B BY -1 GIVING MV50B.	CM000048
00274	013210	ADD 1 TO A. MOVE 9 TO B.	CM000048
00275	013220	PERFORM Q.	CM000048
00276	013230	IF N-SW = 1 MOVE 0 TO N-SW	CM000048
00277	013240	SUBTRACT PS12 FROM 0 GIVING PS12.	CM000048
00278	013250	PERFORM O.	CM000048
00279	014010	IF N-SW = 1 MOVE 0 TO N-SW	CM000048
00280	014020	SUBTRACT PSIMV2 FROM 0 GIVING PSIMV2.	CM000048
00281	014030	MOVE 59 TO B.	CM000048
00282	014040	PERFORM V.	CM000048

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00283	014050	IF M-SW = 1 MOVE 0 TO M-SW	CM000048
00284	014060	MULTIPLY MV75A BY -1 GIVING MV75A.	CM000048
00285	014070	PERFORM T.	CM000048
00286	014080	IF M-SW = 1 MOVE 0 TO M-SW	CM000048
00287	014090	SUBTRACT MV75B FROM 0 GIVING MV75B.	CM000048
00288	014100	MOVE 29 TO A MOVE 9 TO B.	CM000048
00289	014110	PERFORM Q.	CM000048
00290	014120	IF N-SW = 1 MOVE 0 TO N-SW	CM000048
00291	014130	MULTIPLY PS13 BY -1 GIVING PS13.	CM000048
00292	014140	PERFORM U.	CM000048
00293	014150	IF N-SW = 1 MOVE 0 TO N-SW	CM000048
00294	014160	MULTIPLY PSIMV3 BY -1 GIVING PSIMV3.	CM000048
00295	014170	MOVE 59 TO B.	CM000048
00296	014180	PERFORM V.	CM000048
00297	014190	IF M-SW = 1 MOVE 0 TO M-SW	CM000048
00298	014200	COMPUTE MV100A = MV100A * -1.	CM000048
00299	014210	PERFORM T.	CM000048
00300	014220	IF M-SW = 1 MOVE 0 TO M-SW	CM000048
00301	014230	COMPUTE MV100B = (0 - MV100B).	CM000048
00302	014240	MOVE 30 TO A. MOVE 9 TO B.	CM000048
00303	014250	PERFORM Q.	CM000048
00304	015010	IF N-SW = 1 MOVE 0 TO N-SW	CM000048
00305	015020	COMPUTE PS14 = (PS14 * -1).	CM000048
00306	015030	PERFORM U.	CM000048
00307	015040	IF N-SW = 1 MOVE 0 TO N-SW	CM000048
00308	015050	COMPUTE PSIMV4 = (PSIMV4 * -1).	CM000048
00309	015060	MOVE 59 TO B.	CM000048
00310	015070	PERFORM V.	CM000048
00311	015080	IF M-SW = 1 MOVE 0 TO M-SW	CM000048
00312	015090	COMPUTE MV75AA = (0 - MV75AA).	CM000048
00313	015100	PERFORM T.	CM000048
00314	015110	IF M-SW = 1 MOVE 0 TO M-SW	CM000048
00315	015120	COMPUTE MV75BB = (0 - MV75BB).	CM000048
00316	015130	MOVE 31 TO A. MOVE 9 TO B.	CM000048
00317	015140	PERFORM Q.	CM000048
00318	015150	IF N-SW = 1 MOVE 0 TO N-SW	CM000048
00319	015160	COMPUTE PS15 = (PS15 / -1).	CM000048
00320	015170	PERFORM U.	CM000048
00321	015180	IF N-SW = 1 MOVE 0 TO N-SW	CM000048
00322	015190	COMPUTE PSIMV5 = (PSIMV5 * -1).	CM000048
00323	015200	MOVE 59 TO B.	CM000048
00324	015210	PERFORM V.	CM000048
00325	015220	IF M-SW = 1 MOVE 0 TO M-SW	CM000048
00326	015230	COMPUTE MV50AA = (MV50AA / -1).	CM000048
00327	015240	PERFORM T.	CM000048
00328	015250	IF M-SW = 1 MOVE 0 TO M-SW	CM000048
00329	016010	COMPUTE MV50BB = MV50BB * -1.	CM000048
00330	016020	MOVE 32 TO A. MOVE 9 TO B.	CM000048
00331	016030	PERFORM Q.	CM000048
00332	016040	IF N-SW = 1 MOVE 0 TO N-SW	CM000048
00333	016050	COMPUTE PS16 = (0 - PS16).	CM000048
00334	016060	PERFORM U.	CM000048
00335	016070	IF N-SW = 1 MOVE 0 TO N-SW	CM000048
00336	016080	COMPUTE PSIMV6 = (PSIMV6 * -1).	CM000048
00337	016090	MOVE 59 TO B.	CM000048
00338	016100	PERFORM V.	CM000048
00339	016110	IF M-SW = 1 MOVE 0 TO M-SW	CM000048

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00340	016120	COMPUTE MV25AA = (MV25AA * -1).	CM000048
00341	016130	PERFORM T.	CM000048
00342	016140	IF M-SW = 1 MOVE 0 TO M-SW	CM000048
00343	016150	COMPUTE MV25BB = (MV25BB * -1).	CM000048
00344	016160	MOVE 33 TO A. MOVE 9 TO B.	CM000048
00345	016170	PERFORM Q.	CM000048
00346	016180	IF N-SW = 1 MOVE 0 TO M-SW	CM000048
00347	016190	COMPUTE PSI7 = (0 - PSI7).	CM000048
00348	016200	PERFORM D.	CM000048
00349	016210	IF N-SW = 1 MOVE 0 TO M-SW	CM000048
00350	016220	SUBTRACT PSIMV7 FROM 0 GIVING PSIMV7.	CM000048
00351	016230	MOVE 59 TO B.	CM000048
00352	016240	PERFORM V.	CM000048
00353	016250	IF M-SW = 1 MOVE 0 TO M-SW	CM000048
00354	017010	COMPUTE MVOAA = (MVOAA * -1).	CM000048
00355	017020	PERFORM Y.	CM000048
00356	017030	IF M-SW = 1 MOVE 0 TO M-SW	CM000048
00357	017040	COMPUTE MVOBB = (MVOBB * -1).	CM000048
00358	017050	MOVE 37 TO A. MOVE 65 TO B. MOVE 0 TO C.	CM000048
00359	017060	PERFORM MOVE-DATA 3 TIMES.	CM000048
00360	017070	ADD 3 TO B.	CM000048
00361	017080	PERFORM MOVE-DATA 3 TIMES.	CM000048
00362	017090	MOVE 38 TO A. MOVE 18 TO B.	CM000048
00363	017100 K.	PERFORM MAKE-NEG THRU MOVE-DATA 3 TIMES.	CM000048
00364	017110	ADD 1 TO B.	CM000048
00365	017120	PERFORM MAKE-NUMERIC THRU MOVE-DATA 2 TIMES.	CM000048
00366	017130 H.	IF M-SW = 1 MOVE 0 TO M-SW	CM000048
00367	017140	COMPUTE GOUT-AT = (GOUT-AT * -1).	CM000048
00368	017150	MOVE 29 TO B.	CM000048
00369	017160	PERFORM MAKE-NEG THRU MOVE-DATA 3 TIMES.	CM000048
00370	017170	ADD 1 TO B.	CM000048
00371	017180	PERFORM MAKE-NUMERIC THRU MOVE-DATA 3 TIMES.	CM000048
00372	017190	IF M-SW = 1 MOVE 0 TO M-SW	CM000048
00373	017200	COMPUTE GOUTPSIA = (GOUTPSIA * -1).	CM000048
00374	017210	MOVE 71 TO B.	CM000048
00375	017220	PERFORM MOVE-DATA 2 TIMES.	CM000048
00376	017230	MOVE 78 TO B.	CM000048
00377	017240	PERFORM MOVE-DATA 2 TIMES.	CM000048
00378	017250	MOVE 39 TO A. MOVE 18 TO B.	CM000048
00379	018010 L.	PERFORM MAKE-NEG THRU MOVE-DATA 3 TIMES.	CM000048
00380	018020	ADD 1 TO B.	CM000048
00381	018030	PERFORM MAKE-NUMERIC THRU MOVE-DATA 3 TIMES.	CM000048
00382	018040 J.	IF M-SW = 1 MOVE 0 TO M-SW	CM000048
00383	018050	COMPUTE GUNBALANCE = (GUNBALANCE * -1).	CM000048
00384	018060	MOVE 42 TO B.	CM000048
00385	018070	PERFORM MOVE-DATA.	CM000048
00386	018080	MOVE 69 TO B.	CM000048
00387	018090 F.	PERFORM MAKE-NEG THRU MOVE-DATA 4 TIMES.	CM000048
00388	018100	ADD 1 TO B.	CM000048
00389	018110	PERFORM MAKE-NUMERIC THRU MOVE-DATA 2 TIMES.	CM000048
00390	018120 GA.	IF M-SW = 1 MOVE 0 TO M-SW	CM000048
00391	018130	COMPUTE GRCAL-YKN = (GRCAL-YKN * -1).	CM000048
00392	018140	MOVE 80 TO B.	CM000048
00393	018150	PERFORM MOVE-DATA.	CM000048
00394	018160	MOVE 40 TO A. MOVE 19 TO B.	CM000048
00395	018170	PERFORM L.	CM000048
00396	018180	IF M-SW = 1 MOVE 0 TO M-SW	CM000048

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00397	018190	COMPUTE GFS-SEN = (GFS-SEN * -1).	CM000048
00398	018200	MOVE 41 TO A. MOVE 20 TO B.	CM000048
00399	018210	PERFORM K.	CM000048
00400	018220	IF M-SW = 1 MOVE 0 TO M-SW	CM000048
00401	018230	COMPUTE GMAX-N-LIN = (GMAX-N-LIN * -1).	CM000048
00402	018240	MOVE 42 TO A. MOVE 19 TO B.	CM000048
00403	018250	PERFORM F.	CM000048
00404	019010	IF M-SW = 1 MOVE 0 TO M-SW	CM000048
00405	019020	COMPUTE GMAX-HYST = (GMAX-HYST * -1).	CM000048
00406	019030	MOVE 43 TO A. MOVE 21 TO B.	CM000048
00407	019040	PERFORM MAKE-NEG THRU MOVE-OATA 2 TIMES.	CM000048
00408	019050	ADD 1 TO B.	CM000048
00409	019060	PERFORM MAKE-NEG THRU MOVE-OATA 2 TIMES.	
00410	019061	IF N-SW = 1 MOVE 0 TO N-SW MOVE 99.99 TO GMAX-N-REPT.	
00411	019070	IF M-SW = 0 MOVE 0 TO M-SW	CM000048
00412	019080	COMPUTE GMAX-N-REPT = (GMAX-N-REPT * -1).	CM000048
00413	019090	MOVE 81 TO B.	CM000048
00414	019100	PERFORM MOVE-DATA.	CM000048
00415	019110	MOVE 46 TO A. MOVE 49 TO B.	CM000048
00416	019120	II. PERFORM MAKE-NEG THRU MOVE-DATA 5 TIMES.	CM000048
00417	019130	ADD 1 TO B.	CM000048
00418	019140	PERFORM MAKE-NUMERIC THRU MOVE-DATA.	CM000048
00419	019150	JJ. IF M-SW = 1 MOVE 0 TO M-SW	CM000048
00420	019160	COMPUTE G-RN01 = (G-RN01 * -1).	CM000048
00421	019170	KK. PERFORM MAKE-NEG THRU MOVE-OATA 7 TIMES.	CM000048
00422	019180	ADD 1 TO B.	CM000048
00423	019190	PERFORM MAKE-NUMERIC THRU MOVE-OATA 3 TIMES.	CM000048
00424	019200	LL. IF M-SW = 1 MULTIPLY G-RN02 BY -1 GIVING G-RN02	CM000048
00425	019210	MOVE 0 TO M-SW.	CM000048
00426	019220	PERFORM CC.	CM000048
00427	019230	IF M-SW = 1 MOVE 0 TO M-SW	CM000048
00428	019240	COMPUTE G-RN03 = (G-RN03 * -1).	CM000048
00429	019241	IF N-SW = 1 MOVE 99999.99 TO G-RN03 MOVE 0 TO N-SW.	
00430	019250	ADD C, 151 GIVING D.	CM000048
00431	020010	MOVE 47 TO A MOVE 24 TO B.	CM000048
00432	020020	PERFORM MAKE-NUMERIC THRU MOVE-DATA 2 TIMES.	CM000048
00433	020030	ADD 1 TO B.	CM000048
00434	020040	PERFORM MAKE-NUMERIC THRU MOVE-DATA 2 TIMES.	CM000048
00435	020050	ADD 1 TO B.	CM000048
00436	020060	PERFORM MAKE-NUMERIC THRU MOVE-DATA 2 TIMES.	CM000048
00437	020070	MOVE 49 TO B.	CM000048
00438	020080	AA. PERFORM MAKE-NEG THRU MOVE-DATA 5 TIMES.	CM000048
00439	020090	ADD 1 TO B.	CM000048
00440	020100	PERFORM MAKE-NUMERIC THRU MOVE-DATA 3 TIMES.	CM000048
00441	020110	88. IF M-SW = 1 MOVE 0 TO M-SW	CM000048
00442	020120	COMPUTE G-RN11 = (G-RN11 * -1).	CM000048
00443	020130	PERFORM AA.	CM000048
00444	020140	IF M-SW = 1 MOVE 0 TO M-SW	CM000048
00445	020150	COMPUTE G-RN12 = (G-RN12 * -1).	CM000048
00446	020160	CC. PERFORM MAKE-NEG THRU MOVE-DATA 5 TIMES.	CM000048
00447	020170	ADD 1 TO B.	CM000048
00448	020180	PERFORM MAKE-NUMERIC THRU MOVE-DATA 2 TIMES.	CM000048
00449	020190	DD. IF M-SW = 1 MOVE 0 TO M-SW	CM000048
00450	020200	COMPUTE G-RN13 = (G-RN13 * -1).	CM000048
00451	020210	EE. PERFORM MAKE-NEG THRU MOVE-DATA 6 TIMES.	CM000048
00452	020220	ADD 1 TO B.	CM000048
00453	020230	PERFORM MAKE-NUMERIC THRU MOVE-DATA 3 TIMES.	CM000048

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00454	020240	FF. IF M-SW = 1 MOVE 0 TO M-SW	CM000048
00455	020250	COMPUTE G-RV14 = (G-RN14 * -1).	CM000048
00456	021010	IF N-SW = 1 MOVE 999999.999 TO G-RN14 MOVE 0 TO N-SW.	CM000048
00457	021020	MOVE 48 TO A. MOVE 49 TO B.	CM000048
00458	021030	PERFORM AA.	CM000048
00459	021040	IF M-SW = 1 MOVE 0 TO M-SW	CM000048
00460	021050	COMPUTE G-RN21 = (G-RN21 * -1).	CM000048
00461	021060	PERFORM AA.	CM000048
00462	021070	IF M-SW = 1 MOVE 0 TO M-SW	CM000048
00463	021080	COMPUTE G-RV22 = (G-RN22 * -1).	CM000048
00464	021090	PERFORM CC.	CM000048
00465	021100	IF M-SW = 1 MOVE 0 TO M-SW	CM000048
00466	021110	COMPUTE G-RN23 = (G-RN23 * -1).	CM000048
00467	021120	PERFORM EE.	CM000048
00468	021130	IF M-SW = 1 MOVE 0 TO M-SW	CM000048
00469	021140	COMPUTE G-RN24 = (0 - G-RN24).	CM000048
00470	021150	IF N-SW = 1 MOVE 999999.999 TO G-RN24 MOVE 0 TO N-SW.	CM000048
00471	021160	MOVE 49 TO A. MOVE 18 TO B.	CM000048
00472	021170	PERFORM DMAKE-NEG THRU DMOVE-DATA 3 TIMES	CM000048
00473	021180	ADD 1 TO B.	CM000048
00474	021190	PERFORM DMAKE-NUMERIC THRU DMOVE-DATA 2 TIMES.	CM000048
00475	021200	IF N-SW = 1 MOVE 0 TO N-SW	CM000048
00476	021210	MOVE 999.99 TO GOP-AT.	CM000048
00477	021220	IF M-SW = 1 MOVE 0 TO M-SW	CM000048
00478	021230	COMPUTE GOP-AT = (GOP-AT * -1).	CM000048
00479	021240	MOVE 25 TO B.	CM000048
00480	021250	GG. PERFORM DMAKE-NEG THRU DMOVE-DATA 3 TIMES.	CM000048
00481	022010	ADD 1 TO B.	CM000048
00482	022020	PERFORM DMAKE-NUMERIC THRU DMOVE-DATA 3 TIMES.	CM000048
00483	022030	HH. IF N-SW = 1 MOVE 0 TO N-SW	CM000048
00484	022040	MOVE 999.999 TO GOP-PSIA.	CM000048
00485	022050	IF M-SW = 1 MOVE 0 TO M-SW	CM000048
00486	022060	COMPUTE GOP-PSIA = (GOP-PSIA * -1).	CM000048
00487	022070	MOVE 49 TO B.	CM000048
00488	022080	PERFORM AA.	CM000048
00489	022090	IF M-SW = 1 MOVE 0 TO M-SW	CM000048
00490	022100	COMPUTE G-RN31 = (G-RN31 * -1).	CM000048
00491	022110	PERFORM AA.	CM000048
00492	022120	IF M-SW = 1 MOVE 0 TO M-SW	CM000048
00493	022130	COMPUTE G-RN32 = (G-RN32 * -1).	CM000048
00494	022140	PERFORM CC.	CM000048
00495	022150	IF M-SW = 1 MOVE 0 TO M-SW	CM000048
00496	022160	COMPUTE G-RN33 = (G-RN33 * -1).	CM000048
00497	022170	PERFORM EE.	CM000048
00498	022180	IF M-SW = 1 MOVE 0 TO M-SW	CM000048
00499	022190	COMPUTE G-RN34 = (0 - G-RN34).	CM000048
00500	022200	IF N-SW = 1 MOVE 0 TO N-SW	CM000048
00501	022210	MOVE 999999.999 TO G-RN34.	CM000048
00502	022220	MOVE 50 TO A. MOVE 18 TO B.	CM000048
00503	022230	PERFORM GG.	CM000048
00504	022240	IF M-SW = 1 MOVE 0 TO M-SW	CM000048
00505	022250	COMPUTE GOP-UNB = (GOP-UNB * -1).	CM000048
00506	023010	IF N-SW = 1 MOVE 0 TO N-SW	CM000048
00507	023020	MOVE 999.999 TO GOP-UNB.	CM000048
00508	023030	MOVE 49 TO B.	CM000048
00509	023040	PERFORM AA.	CM000048
00510	023050	IF M-SW = 1 MOVE 0 TO M-SW	CM000048

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00511	023060	COMPUTE G-RN41 = G-RN41 * -1.	CM000048
00512	023070	PERFORM AA.	CM000048
00513	023080	IF M-SW = 1 MOVE 0 TO M-SW	CM000048
00514	023090	COMPUTE G-RN42 = (G-RN42).	CM000048
00515	023100	PERFORM CC.	CM000048
00516	023110	IF M-SW = 1 MOVE 0 TO M-SW	CM000048
00517	023120	COMPUTE G-RN43 = (G-RN43 * -1).	CM000048
00518	023130	PERFORM EF.	CM000048
00519	023140	IF M-SW = 1 MOVE 0 TO M-SW	CM000048
00520	023150	COMPUTE G-RN44 = G-RN44 * -1.	CM000048
00521	023160	IF N-SW = 1 MOVE 0 TO N-SW	CM000048
00522	023170	MOVE 999999.999 TO G-RN44.	CM000048
00523	023180	MOVE 51 TO A. MOVE 19 TO B.	CM000048
00524	023190	PERFORM GG.	CM000048
00525	023200	IF M-SW = 1 MOVE 0 TO M-SW	CM000048
00526	023210	COMPUTE G-RN45 = G-RN45 * -1.	CM000048
00527	023220	IF N-SW = 1 MOVE 0 TO N-SW	CM000048
00528	023230	MOVE 999.999 TO G-RN45.	CM000048
00529	023240	MOVE 49 TO B.	CM000048
00530	023250	PERFORM II.	CM000048
00531	024010	IF M-SW = 1 MOVE 0 TO M-SW	CM000048
00532	024020	COMPUTE G-RNL1 = G-RNL1 * -1.	CM000048
00533	024030	PERFORM KK.	CM000048
00534	024040	IF M-SW = 1 MOVE 0 TO M-SW	CM000048
00535	024050	COMPUTE G-RNL2 = G-RNL2 * -1.	CM000048
00536	024060	PERFORM CC.	CM000048
00537	024070	IF M-SW = 1 MOVE 0 TO M-SW	CM000048
00538	024080	COMPUTE G-RNL3 = G-RNL3 * -1.	CM000048
00539	024090	MOVE D TO C.	CM000048
00540	024100	MOVE 52 TO A. MOVE 20 TO B.	CM000048
00541	024110	PERFORM K.	CM000048
00542	024120	IF M-SW = 1 MOVE 0 TO M-SW	CM000048
00543	024130	COMPUTE BMAX-N-LIN = (BMAX-N-LIN * -1).	CM000048
00544	024140	IF N-SW = 1 MOVE 9999.99 TO BMAX-N-LIN MOVE 0 TO N-SW.	CM000048
00545	024150	MOVE 53 TO A. MOVE 19 TO B.	CM000048
00546	024160	PERFORM F.	CM000048
00547	024170	IF M-SW = 1 MOVE 0 TO M-SW	CM000048
00548	024180	COMPUTE BMAX-HYST = (BMAX-HYST * -1).	CM000048
00549	024190	IF N-SW = 1 MOVE 9999.99 TO BMAX-HYST MOVE 0 TO N-SW.	CM000048
00550	024200	MOVE 54 TO A. MOVE 21 TO B.	CM000048
00551	024210	PERFORM MAKE-NEG THRU MOVE-DATA 2 TIMES.	CM000048
00552	024220	ADD I TO B.	CM000048
00553	024230	PERFORM MAKE-NUMERIC THRU MOVE-DATA 2 TIMES.	CM000048
00554	024240	IF M-SW = 1 MOVE 0 TO M-SW	CM000048
00555	024250	COMPUTE BMAX-N-REPT = BMAX-N-REPT * -1.	CM000048
00556	025010	IF N-SW = 1 MOVE 0 TO N-SW	CM000048
00557	025020	MOVE 99.99 TO BMAX-N-REPT.	CM000048
00558	025030	MOVE 65 TO B.	CM000048
00559	025040	PERFORM MOVE-DATA 20 TIMES.	CM000048
00560	025050	MOVE 57 TO A. MOVE 64 TO B.	CM000048
00561	025060	PERFORM NN. MOVE 77 TO B.	CM000048
00562	025070	PERFORM NN.	CM000048
00563	025080	WRITE GOT.	CM000048
00564	025100	GO TO FIRS.	CM000048
00565	025110	G-EOF.	CM000048
00566	025120	CLOSE GIL-IN GIL-OT.	CM000048
00567	025130	STOP RUN.	CM000048

II

00568	026010	READ-GILMORE.	CM000048
00569	026020	READ GIL-IN AT ENO GO TO G-EDF.	CM000048
00570	026030	ADD 1 TO A	CM000048
00571	026040	MOVE GIN TO GIL-REC (A).	CM000048
00572	026050	MAKE-NEG.	CM000048
00573	026060	IF G (A, B) = '-' MOVE 1 TO M-SW	CM000048
00574	026070	MOVE SPACE TO G (A, B).	CM000048
00575		IF G (A, B) = '*' MOVE 1 TO N-SW.	
00576	026080	MAKE-NUMERIC.	CM000048
00577	026090	IF G (A, B) = SPACE MOVE '0' TO G (A, B).	CM000048
00578	026100	IF G (A, B) = 'N' OR G (A, B) = 'A' MOVE 1 TO N-SW.	CM000048
00579	026110	MOVE-DATA.	CM000048
00580	026120	MOVE G (A, B) TO GIL (C).	CM000048
00581	026130	ADD 1 TO B. ADD 1 TO C.	CM000048
00582	026140	DMAKE-NEG.	CM000048
00583	026150	IF G (A, B) = '-' MOVE 1 TO M-SW	CM000048
00584	026160	MOVE SPACE TO G (A, B).	CM000048
00585		IF G (A, B) = '*' MOVE 1 TO N-SW.	
00586	026170	DMAKE-NUMERIC.	CM000048
00587	026180	IF G (A, B) = SPACE MOVE '0' TO G (A, B).	CM000048
00588	026190	IF G (A, B) = 'N' OR G (A, B) = 'A' MOVE 1 TO N-SW.	CM000048
00589	026200	DMOVE-DATA.	CM000048
00590	026210	MOVE G (A, B) TO GIL (D).	CM000048
00591	026220	ADD 1 TO B. ADD 1 TO D.	CM000048

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00001	01	IDENTIFICATION DIVISION.		CM000020
00002	001010	PROGRAM-10. 'CM000023'.		CM000023
00003 **	04	ENVIRONMENT DIVISION.		CM000020
00004	05	CONFIGURATION SECTION.		CM000020
00005	06	SOURCE-COMPUTER. IBM-360 H50.		CM000020
00006	07	OBJECT-COMPUTER. IBM-360 H50.		CM000020
00007	08	INPUT-OUTPUT SECTION.		CM000020
00008	09	FILE-CONTROL.		CM000020
00009	10		SELECT A-FILE ASSIGN 'AFILEREC' UTILITY.	CM000020
00010	11		SELECT B-FILE ASSIGN 'BFILEREC' UTILITY.	CM000020
00011	12		SELECT C-FILE ASSIGN 'CFILEREC' UTILITY.	CM000020
00012	1030		SELECT ADUT ASSIGN 'ADUTREC' UTILITY.	
00013	1040		SELECT BOUT ASSIGN 'BOUTREC' UTILITY.	
00014	1050		SELECT COUT ASSIGN 'COUTREC' UTILITY.	
00015 **	01	DATA DIVISION.		CM000020
00016	02	FILE SECTION.		CM000020
00017	03	FD A-FILE	RECORD CONTAINS 80 CHARACTERS	CM000020
00018	04		LABEL RECORDS ARE STANDARD	CM000020
00019	05		RECORDING MODE IS F	CM000020
00020	06		BLOCK CONTAINS 1 RECORDS	CM000020
00021	07		DATA RECORD IS A-REC.	CM000020
00022	08	01 A-REC.		CM000020
00023	09	02 FILLER	PICTURE X(3).	
00024	10	02 FILLER	PICTURE 9.	
00025	11	02 FILLER	PICTURE X(76).	
00026	14	FD B-FILE	RECORD CONTAINS 80 CHARACTERS	CM000020
00027	15		LABEL RECORDS ARE STANDARD	CM000020
00028	16		RECORDING MODE IS F	CM000020
00029	17		BLOCK CONTAINS 1 RECORDS	CM000020
00030	18		DATA RECORD IS B-REC.	CM000020
00031	19	01 B-REC.		CM000020
00032 **	19	02 FILLER	PICTURE X(4).	
00033	20	02 FILLER	PICTURE 9.	
00034	21	02 FILLER	PICTURE X(75).	
00035 **	01	FD C-FILE	RECORD CONTAINS 80 CHARACTERS	CM000020
00036	02		LABEL RECORDS ARE STANDARD	CM000020
00037	03		RECORDING MODE IS F	CM000020
00038	04		BLOCK CONTAINS 1 RECORDS	CM000020
00039	05		DATA RECORD IS C-REC.	CM000020
00040	06	01 C-REC.		CM000020
00041	45	02 FILLER	PICTURE X(4).	
00042	451	02 FILLER	PICTURE 9.	
00043	452	02 FILLER	PICTURE X(75).	
00044	001060	FD ADUT	RECORD CONTAINS 80 CHARACTERS	CM000023
00045	001070		LABEL RECORDS ARE STANDARD	CM000023
00046	001080		RECORDING MODE IS F	CM000023
00047	001090		BLOCK CONTAINS 45 RECORDS	CM000023
00048	001100		DATA RECORD IS ACARD.	CM000023
00049	001110	01 ACARD.		CM000023
00050 **	1120	02 FILLER	PICTURE X(3).	
00051	1121	02 FILLER	PICTURE 9.	
00052	1122	02 FILLER	PICTURE X(76).	
00053	001130	FD BOUT	RECORD CONTAINS 80 CHARACTERS	CM000023
00054	001140		LABEL RECORDS ARE STANDARD	CM000023

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00055	C01150		RECORDING MODE IS F	CM000023
00056	001160		BLOCK CONTAINS 45 RECORDS	CM000023
00057	001170		DATA RECORD IS BCARD.	CM000023
00058	001180	01	BCARD.	CM000023
00059	** 1180	02	FILLER PICTURE X(4).	
00060	1181	02	FILLER PICTURE 9.	
00061	1182	02	FILLER PICTURE X(75).	
00062	001200	FD	COUT RECORD CONTAINS 80 CHARACTERS	CM000023
00063	001210		LABEL RECORDS ARE STANDARD	CM000023
00064	001220		RECORDING MODE IS F	CM000023
00065	001230		BLOCK CONTAINS 45 RECORDS	CM000023
00066	001240		DATA RECORD IS CCARD.	CM000023
00067	** 2010	01	C-CARD.	
00068	2020	02	FILLER PICTURE X(4).	
00069	2021	02	FILLER PICTURE 9.	
00070	2022	02	FILLER PICTURE X(75).	
00071	** 19		WORKING-STORAGE SECTION.	CM000020
00072	20	77	LN-CT PICTURE S99 COMPUTATIONAL-3 VALUE ZERO.	CM000020
00073	002030		PROCEDURE DIVISION.	CM000023
00074	002040		START, OPEN INPUT A-FILE, OPEN INPUT B-FILE, OPEN INPUT C-FILE.	CM000023
00075	002050		OPEN OUTPUT AOUT, OPEN OUTPUT BOUT, OPEN OUTPUT COUT.	CM000023
00076	002060		A-READ, READ A-FILE AT END GO TO B-ENTRY.	CM000023
00077	002070		WRITE ACARD FROM A-REC, GO TO A-READ.	CM000023
00078	002080		B-ENTRY, READ B-FILE AT END GO TO C-ENTRY.	CM000023
00079	002090		WRITE BCARD FROM B-REC, GO TO B-ENTRY.	CM000023
00080	002100		C-ENTRY, READ C-FILE AT END GO TO ENDIT.	CM000023
00081	002110		WRITE C-CARD FROM C-REC, GO TO C-ENTRY.	CM000023
00082	002120		ENDIT, CLOSE A-FILE, CLOSE B-FILE, CLOSE C-FILE, CLOSE AOUT.	CM000023
00083	002130		CLOSE BOUT, CLOSE COUT.	CM000023
00084	002140		STOP RUN.	CM000023

00001	00101	IDENTIFICATION DIVISION.	CM000050
00002	00102	PROGRAM-ID. 'CMC00050'.	CM000050
00003	00103	AUTHOR. JACK ROSE.	CM000050
00004	00104	INSTALLATION. ARD INC TULLAHOMA TENN.	CM000050
00005	00105	DATE-WRITTEN. OCT 16, 1967.	CM000050
00006	00106	DATE-COMPILED. DEC 14, 1968	CM000050
00007	00107	SECURITY.	CM000050
00008	00108	REMARKS. PROGRAM SELECTS MOST RECENT TRANSDUCER FROM GILMORE.	CM000050
00009	00109	ENVIRONMENT DIVISION.	CM000050
00010	00110	CONFIGURATION SECTION.	CM000050
00011	00111	SOURCE-COMPUTER. IBM-360 H50.	CM000050
00012	00112	OBJECT-COMPUTER. IBM-360 H50.	CM000050
00013	00113	INPUT-OUTPUT SECTION.	CM000050
00014	00114	FILE-CONTROL.	CM000050
00015	00115	SELECT GIL-IN ASSIGN '0001' UTILITY.	CM000050
00016	00116	SELECT GIL-OUT ASSIGN '0001' UTILITY.	CM000050
00017	00117	DATA DIVISION.	CM000050
00018	00118	FILE SECTION.	CM000050
00019	00219	FD GIL-IN RECORDING F BLOCK 1 RECORDS RECORD 747	CM000050
00020	00220	LABEL RECORDS STANDARD DATA RECORD IGIL.	CM000050
00021	00221	01 IGIL.	CM000050
00022	00222	02 FILLER PICTURE X(10).	CM000050
00023	00223	02 INSTR-NO PICTURE X(16).	CM000050
00024	00224	02 FILLER PICTURE X(104).	CM000050
00025	00225	02 CAL-DATE.	CM000050
00026	*00201	03 CMO PICTURE 99.	CM000050
00027	00202	03 CBY PICTURE 99.	CM000050
00028	00203	03 CYR PICTURE 99.	CM000050
00029	00204	02 FILLER PICTURE X(611).	CM000050
00030	00206	FD GIL-OUT RECORDING F BLOCK 1 RECORDS RECORD 747	CM000050
00031	00207	LABEL RECORDS STANDARD DATA RECORD OGIL.	CM000050
00032	00208	01 OGIL.	CM000050
00033	00209	02 FILLER PICTURE X(747).	CM000050
00034	00210	WORKING-STORAGE SECTION.	CM000050
00035	00211	77 INS-SW PICTURE X(16) VALUE SPACE.	CM000050
00036	003010	PROCEDURE DIVISION.	CM000050
00037	00302	OPEN INPUT GIL-IN OUTPUT GIL-OUT.	CM000050
00038	00303	READ GIL-IN AT END GO TO EOF.	CM000050
00039	003031	SET-SW.	CM000050
00040	00304	MOVE IGIL TO OGIL.	CM000050
00041	00305	MOVE INSTR-NO TO INS-SW.	CM000050
00042	00306	READG.	CM000050
00043	00307	READ GIL-IN AT END GO TO EOF.	CM000050
00044	00309	IF INSTR-NO = INS-SW MOVE IGIL TO OGIL GO TO READG.	CM000050
00045	00310	WRITE OGIL.	CM000050
00046	00311	GO TO SET-SW.	CM000050
00047	00312	EOF.	CM000050
00048	00313	WRITE OGIL.	CM000050
00049	00314	CLOSE GIL-IN GIL-OUT.	CM000050
00050	00315	STOP RUN.	CM000050

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00001	001010	IDENTIFICATION DIVISION.	CM000051
00002	001020	PROGRAM-ID. 'CM000051'.	CM000051
00003	001030	AUTHOR. JACK ROSE.	CM000051
00004	001040	INSTALLATION. ARO INC TULLAHOMA TENN.	CM000051
00005	001050	DATE-WRITTEN. OCT 26, 1967.	CM000051
00006	001060	DATE-COMPILED. DEC 14, 1968	CM000051
00007	001070	SECURITY.	CM000051
00008	001080	REMARKS. PROGRAM UPDATES PRESSURE TRANSDUCER ON MASTER.	CM000051
00009	001090	ENVIRONMENT DIVISION.	CM000051
00010	001100	CONFIGURATION SECTION.	CM000051
00011	001110	SOURCE-COMPUTER. IBM-360 H50.	CM000051
00012	001120	OBJECT-COMPUTER. IBM-360 H50.	CM000051
00013	001130	INPUT-OUTPUT SECTION.	CM000051
00014	001140	FILE-CONTROL.	CM000051
00015	001150	SELECT GIL-IN ASSIGN '0001' UTILITY.	CM000051
00016	001160	SELECT GIL-OUT ASSIGN '0001' UTILITY.	CM000051
00017	**001160	SELECT MAS-IN ASSIGN '0001' UTILITY.	CM000051
00018	001170	DATA DIVISION.	CM000051
00019	001180	FILE SECTION.	CM000051
00020	002190	FD GIL-IN RECORDING F BLOCK 1 RECORDS RECORD 747	CM000051
00021	002200	LABEL RECORDS STANDARD DATA RECORD IGIL.	CM000051
00022	002210	01 IGIL.	CM000051
00023	002220	02 FILLER PICTURE X(10).	CM000051
00024	002230	02 INSTR-NO PICTURE X(16).	CM000051
00025	002240	02 FILLER PICTURE X(104).	CM000051
00026	002250	02 CAL-DATE.	CM000051
00027	**002010	03 CNO PICTURE 99.	CM000051
00028	002020	03 CBY PICTURE 99.	CM000051
00029	002030	03 CYR PICTURE 99.	CM000051
00030	002040	02 FILLER PICTURE X(611).	CM000051
00031	002050	FD GIL-OUT RECORDING F BLOCK 1 RECORDS RECORD 747	CM000051
00032	002070	LABEL RECORDS STANDARD DATA RECORD OGIL.	CM000051
00033	002080	01 OGIL.	CM000051
00034	002090	02 FILLER PICTURE X(10).	CM000051
00035	002100	02 INSTR-NO PICTURE X(16).	CM000051
00036	002110	02 FILLER PICTURE X(721).	CM000051
00037	002120	FD MAS-IN RECORDING F BLOCK 1 RECORDS RECORD 747	CM000051
00038	002130	LABEL RECORDS STANDARD DATA RECORD MAS.	CM000051
00039	002140	01 MAS.	CM000051
00040	002150	02 FILLER PICTURE X(10).	CM000051
00041	002160	02 MINSN PICTURE X(16).	CM000051
00042	002170	02 FILLER PICTURE X(721).	CM000051
00043	002190	WORKING-STORAGE SECTION.	CM000051
00044	003010	PROCEDURE DIVISION.	CM000051
00045	003020	OPEN INPUT MAS-IN GIL-IN OUTPUT GIL-OUT.	CM000051
00046	003030	READ MAS-IN AT ENO GO TO MEOF.	CM000051
00047	003040	READ-SIL.	CM000051
00048	003050	READ GIL-IN AT ENO GO TO GEOF.	CM000051
00049	003060	CR-INS.	CM000051
00050	003070	IF MINSN < INSTR-NO GO TO LO-MAS.	CM000051
00051	003080	IF MINSN = INSTR-NO GO TO REPLACE-1.	CM000051
00052	003090	MOVE IGIL TO OGIL.	CM000051
00053	003110	WRITE OGIL.	CM000051
00054	003120	READ GIL-IN AT ENO GO TO GEOFL.	CM000051

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00055	003121	GO TO CK-INS.	
00056	003130	LO-MAS.	CM000051
00057	003140	MOVE MAS TO OGIL	CM000051
00058	003160	WRITE OGIL.	CM000051
00059	003170	READ-MAS.	CM000051
00060	003180	READ MAS-IN AT END GO TO ME0F.	CM000051
00061	003190	GO TO CK-INS.	CM000051
00062	003200	REPLACE-1.	CM000051
00063	003210	MOVE IGIL TO OGIL.	CM000051
00064	003230	WRITE OGIL.	CM000051
00065	003240	READ GIL-IN AT END GO TO GE0F.	CM000051
00066	003250	GO TO READ-MAS.	CM000051
00067	003260	GE0F1.	
00068	003270	WRITE OGIL FROM MAS.	
00069	004010	GE0F.	CM000051
00070	004020	READ MAS-IN AT END GO TO ASEND.	CM000051
00071	004030	WRITE OGIL FROM MAS.	CM000051
00072	004040	GO TO GE0F.	CM000051
00073	004050	ME0F.	CM000051
00074	004060	WRITE OGIL FROM IGIL.	CM000051
00075	004070	READ GIL-IN AT END GO TO ASEND.	CM000051
00076	004080	GO TO ME0F.	CM000051
00077	004090	ASEND.	CM000051
00078	004100	CLOSE MAS-IN GIL-IN GIL-JUY.	CM000051
00079	004110	STOP RUN.	CM000051

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00001	001010	IDENTIFICATION DIVISION.		CM000095
00002	001020	PRDGRAM-10. 'CM000096'.		CM000095
00003	001030	AUTHOR. ROSE.		CM000095
00004	001040	ENVIRONMENT DIVISION.		CM000095
00005	001050	CDNFIGURATION SECTION.		CM000095
00006	001060	SOURCE-COMPUTER. IBM-360 H50.		CM000095
00007	001070	OBJECT-COMPUTER. IBM-360 H50.		CM000095
00008	001080	INPJT-OUTPUT SECTION.		CM000095
00009	001090	FILE-CONTROL.		CM000095
00010	001110	SELECT HOOK ASSIGN 'HOOK' UTILITY.		CM000095
00011	001120	SELECT CFILE ASSIGN 'CFILE' UTILITY.		CM000095
00012	001140	SELECT LIST ASSIGN 'LIST' UTILITY.		CM000095
00013	001150	SELECT OCARD ASSIGN 'OCARD' UTILITY.		CM000095
00014	001170	DATA DIVISION.		CM000095
00015	001180	FILE SECTION.		CM000095
00016	002150	FD LIST RECORDING F BLOCK 12 RECORDS RECORD 132		
00017	002160	LABEL RECORDS OMITTED DATA RECORD LIT.		CM000095
00018	002170	01 LIT PICTURE X(132).		CM000095
00019	003010	FD CFILE RECORD CONTAINS 80 CHARACTERS		CM000095
00020	003020	LABEL RECORDS ARE STANDARD		CM000095
00021	003030	RECORDING MODE IS F		CM000095
00022	003040	BLOCK CONTAINS 45 RECORDS		CM000095
00023	003050	DATA RECORD IS CFIL.		CM000095
00024	003060	01 CFIL.		CM000095
00025	003070	02 C1 PICTURE X(4).		CM000095
00026	003080	02 C2 PICTURE 9.		CM000095
00027	003090	02 C3 PICTURE X(7).		CM000095
00028	003100	02 C4 PICTURE X(11).		CM000095
00029	003110	02 C5 PICTURE X(9).		CM000095
00030	003120	02 C6 PICTURE X(9).		CM000095
00031	003130	02 C7 PICTURE X(7).		CM000095
00032	003140	02 C8 PICTURE X(4).		CM000095
00033	003150	02 C9 PICTURE X.		CM000095
00034	003160	02 C10 PICTURE X(9).		CM000095
00035	003170	02 C11 PICTURE X(9).		CM000095
00036	003180	02 C118 PICTURE XXX.		CM000095
00037	003190	02 C12 PICTURE X(6).		CM000095
00038	004010	FD HOOK RECORDING F BLOCK 1 RECORDS RECORD 133		CM000095
00039	004020	LABEL RECORDS STANDARD DATA RECORD HOK.		CM000095
00040	004030	01 HOK.		CM000095
00041	004040	02 FILLER PICTURE X.		CM000095
00042	004050	02 HPAR PICTURE X(9).		CM000095
00043	004060	02 FILLER PICTURE X(58).		CM000095
00044	004070	02 HUDC PICTURE X(5).		CM000095
00045	004080	02 FILLER PICTURE X(25).		CM000095
00046	004090	02 HRDDUT PICTURE X(5).		CM000095
00047	004100	02 RHRDDUT REDEFINES HRDDUT.		CM000095
00048	004110	03 HR1 PICTURE X.		CM000095
00049	004120	03 HR2 PICTURE X.		CM000095
00050	004130	03 HR3 PICTURE X.		CM000095
00051	004131	03 RHR3 REDEFINES HR3 PICTURE 9.		CM000095
00052	004140	03 HR45 PICTURE XX.		CM000095
00053	004141	03 RHR45 REDEFINES HR45 PICTURE 99.		CM000095
00054	004150	02 RRHRDDUT REDEFINES RHRDDUT.		CM000095

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00055	004160	03	HR12	PICTURE	XX.	CM000095
00056	004170	03	HR345	PICTURE	XXX.	CM000095
00057	004180	03	R345	REDEFINES	HR345 PICTURE 999.	CM000095
00058	004181	02	HROT	REDEFINES	HRDDUT.	CM000095
00059	004182	03	HRDT1	PICTURE	X.	CM000095
00060	004183	03	HRD23	PICTURE	99.	CM000095
00061	004184	03	HR045	PICTURE	XX.	CM000095
00062	004210	02	FILLER	PICTURE	X(20).	CM000095
00063	004220	02	HITEM	PICTURE	XXXX.	CM000095
00064	004230	02	FILLER	PICTURE	X(6).	CM000095
00065	005060	FD	DCARD	RECORDING F	BLOCK 1 RECORDS...RECORD 41	
00066	005070			LABEL RECDRDS	STANDARD DATA RECORD DCAR.	CM000095
00067	005090	01	DCAR.			CM000095
00068	005090	02	OR1	PICTURE	X(9).	CM000095
00069	005100	02	FILLER	PICTURE	X.	CM000095
00070	005110	02	DR2	PICTURE	XX.	CM000095
00071	005111	02	RDR	REDEFINES	DR2.	CM000095
00072	005112	03	RDR1	PICTURE	X.	CM000095
00073	005113	03	RDR2	PICTURE	X.	CM000095
00074	005120	02	FILLER	PICTURE	X.	CM000095
00075	005130	02	OR3	PICTURE	XX.	CM000095
00076	005131	02	ROR3	REDEFINES	DR3.	CM000095
00077	005132	03	OR3A	PICTURE	X.	CM000095
00078	005133	03	OR3B	PICTURE	X.	CM000095
00079	005140	02	FILLER	PICTURE	X.	CM000095
00080	005150	02	DR4	PICTURE	XX.	CM000095
00081	005151	02	RDR4	REDEFINES	DR4.	CM000095
00082	005152	03	DR4A	PICTURE	X.	CM000095
00083	005153	03	DR4B	PICTURE	X.	CM000095
00084	005160	02	FILLER	PICTURE	X.	CM000095
00085	005170	02	DR5	PICTURE	XX.	CM000095
00086	005171	02	RDR5	REDEFINES	OR5.	CM000095
00087	005172	03	DR5A	PICTURE	X.	CM000095
00088	005173	03	DR5B	PICTURE	X.	CM000095
00089	005180	02	FILLER	PICTURE	X.	CM000095
00090	005190	02	OR7	PICTURE	XXX.	CM000095
00091	005191	02	ROR7	REDEFINES	OR7.	CM000095
00092	005192	03	RDR7A	PICTURE	X.	CM000095
00093	005193	03	RDR7B	PICTURE	99.	CM000095
00094	005194	02	RRDR7	REDEFINES	OR7.	CM000095
00095	005195	03	RR7A	PICTURE	X.	CM000095
00096	005196	03	RR7B	PICTURE	X.	CM000095
00097	005197	03	RR7C	PICTURE	X.	CM000095
00098	005200	02	FILLER	PICTURE	X.	CM000095
00099	005210	02	OR8	PICTURE	XXX.	CM000095
00100	005211	02	ROR8	REDEFINES	OR8.	CM000095
00101	005212	03	ROR8A	PICTURE	X.	CM000095
00102	005213	03	ROR8B	PICTURE	XX.	CM000095
00103	005220	02	FILLER	PICTURE	X(10).	CM000095
00104	005230	02	DR6	PICTURE	XX.	CM000095
00105	023010		WORKING-STORAGE	SECTION.		CM000095
00106	023020	77	J	PICTURE	999.	CM000095
00107	023030	77	K	PICTURE	999.	CM000095
00108	023040	77	SW1	PICTURE	9 VALUE 0.	CM000095
00109	023050	77	MSW1	PICTURE	9 VALUE 0.	CM000095
00110	023060	77	MSW2	PICTURE	9 VALUE 0.	CM000095
00111	023070	77	MSW3	PICTURE	9 VALUE 0.	CM000095

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00112	023080	77	NEG-SW	PICTURE	9	VALUE 0.	CM000095
00113	023090	77	JJ	PICTURE	999	VALUE 0.	CM000095
00114	023100	77	JECT	PICTURE	99	VALUE 50.	CM000095
00115	023110	77	KK	PICTURE	999	VALUE 0.	CM000095
00116	**011010	01	SVTABLE.				CM000095
00117	011020	02	SVTABL	OCCURS 60.			CM000095
00118	011050	03	SV3	PICTURE X(9)	OCCURS 12.		CM000095
00119	011080	01	DOTABLE.				CM000095
00120	011090	02	OIDDLE	OCCURS 7.			
00121	011100	03	DD1	PICTURE X	OCCURS 64.		
00122	011110	03	DD2	PICTURE XX	OCCURS 64.		CM000095
00123	011120	03	DD3	PICTURE X(9)	OCCURS 64.		CM000095
00124	011130	03	DD4	PICTURE XXX	OCCURS 64.		CM000095
00125	011140	03	DD5	PICTURE XX	OCCURS 64.		CM000095
00126	011150	03	DD6	PICTURE X(9)	OCCURS 64.		CM000095
00127	011160	03	DD7	PICTURE XX	OCCURS 64.		CM000095
00128	011170	03	DD8	PICTURE X(9)	OCCURS 64.		CM000095
00129	011180	03	DD9	PICTURE XX	OCCURS 64.		CM000095
00130	011190	03	DD10	PICTURE X(9)	OCCURS 64.		CM000095
00131	011200	03	DD11	PICTURE XX	OCCURS 64.		CM000095
00132	011201	01	DOTAB2.				
00133	011202	02	DA00LE	OCCURS 7.			
00134	011210	03	DD12	PICTURE X(9)	OCCURS 64.		CM000095
00135	011220	03	DD13	PICTURE XX	OCCURS 64.		CM000095
00136	011230	03	DD14	PICTURE X(9)	OCCURS 64.		CM000095
00137	011240	03	DD15	PICTURE X(10)	OCCURS 64.		CM000095
00138	011250	03	DD16	PICTURE X(14)	OCCURS 64.		CM000095
00139	011260	03	DDSN	PICTURE X	OCCURS 64.		CM000095
00140	019010	01	OQLIST.				CM000095
00141	019020	02	FILLER	PICTURE X(4)	VALUE SPACE.		CM000095
00142	019030	02	LDD1	PICTURE 9.			CM000095
00143	019040	02	FILLER	PICTURE XX	VALUE SPACE.		CM000095
00144	019050	02	LDD2	PICTURE 99.			CM000095
00145	019060	02	FILLER	PICTURE XX	VALUE SPACE.		CM000095
00146	019070	02	LDD3	PICTURE X(9)			CM000095
00147	019080	02	FILLER	PICTURE XX	VALUE SPACE.		CM000095
00148	019090	02	LDD4	PICTURE XXX.			CM000095
00149	019100	02	FILLER	PICTURE XX	VALUE SPACE.		CM000095
00150	019110	02	LDD5	PICTURE XX.			CM000095
00151	019120	02	FILLER1	PICTURE XX	VALUE SPACE.		CM000095
00152	019130	02	LDD6	PICTURE X(9)			CM000095
00153	019140	02	FILLER	PICTURE XX	VALUE SPACE.		CM000095
00154	019150	02	LDD7	PICTURE XX.			CM000095
00155	019160	02	FILLER2	PICTURE XX	VALUE SPACE.		CM000095
00156	019170	02	LDD8	PICTURE X(9)			CM000095
00157	019180	02	FILLER	PICTURE XX	VALUE SPACE.		CM000095
00158	019190	02	LDD9	PICTURE XX.			CM000095
00159	019200	02	FILLER3	PICTURE XX	VALUE SPACE.		CM000095
00160	019210	02	LDD10	PICTURE X(9)			CM000095
00161	019220	02	FILLER	PICTURE XX	VALUE SPACE.		CM000095
00162	019230	02	LDD11	PICTURE XX.			CM000095
00163	019240	02	FILLER4	PICTURE XX	VALUE SPACE.		CM000095
00164	019250	02	LDD12	PICTURE X(9)			CM000095
00165	020010	02	FILLER	PICTURE XX	VALUE SPACE.		CM000095
00166	020020	02	LDD13	PICTURE XX.			CM000095
00167	020030	02	FILLER5	PICTURE XX	VALUE SPACE.		CM000095
00168	020040	02	LDD14	PICTURE X(9)			CM000095

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00169 020050 02 FILLER PICTURE XX VALUE SPACE. CM000095
00170 020060 02 LOD15 PICTURE X(10). CM000095
00171 020070 02 FILLER PICTURE XX VALUE SPACE. CM000095
00172 020080 02 LOD16 PICTURE X(14). CM000095
00173 020090 02 FILLER PICTURE XXX VALUE SPACE. CM000095
00174 01 SVTOP3
00175 02 FILLER PICTURE X VALUE SPACE.
00176 02 FILLER PICTURE X(25) VALUE 'NO RANGE PORT 01 PORT 0'.
00177 02 FILLER PICTURE X(25) VALUE '2 PORT 03 PORT 04 P'.
00178 02 FILLER PICTURE X(25) VALUE 'ORT 05 PORT 06 PORT 0'.
00179 02 FILLER PICTURE X(25) VALUE '7 PORT 08 PORT 09 P'.
00180 02 FILLER PICTURE X(26) VALUE 'ORT 10 PORT 11 PORT 12'.
00181 02 FILLER PICTURE X(5) VALUE SPACE.
00182 01 SVTOP1.
00183 02 FILLER PICTURE X(36) VALUE SPACE.
00184 02 FILLER PICTURE X(25) VALUE 'SCANNER VALVE ASSIGNMENTS'.
00185 02 FILLER PICTURE X(33) VALUE SPACE.
00186 02 FILLER PICTURE X(11) VALUE 'SHEET OF'.
00187 02 FILLER PICTURE X(27) VALUE SPACE.
00188 01 SVTOP2.
00189 02 FILLER PICTURE X VALUE SPACE.
00190 02 FILLER PICTURE X(12) VALUE 'SV OUCER '.
00191 02 FILLER PICTURE X(119) VALUE SPACE.
00192 01 SVLINE.
00193 02 FILLER PICTURE X VALUE SPACE.
00194 02 SVNO PICTURE 99.
00195 02 FILLER PICTURE X(17) VALUE ' VAC REF '.
00196 02 PORT2 PICTURE X(10).
00197 02 PORT3 PICTURE X(10).
00198 02 PORT4 PICTURE X(10).
00199 02 PORT5 PICTURE X(10).
00200 02 PORT6 PICTURE X(10).
00201 02 PORT7 PICTURE X(10).
00202 02 PORT8 PICTURE X(10).
00203 02 PORT9 PICTURE X(10).
00204 02 PORT10 PICTURE X(10).
00205 02 PORT11 PICTURE X(10).
00206 02 PORT12 PICTURE X(10).
00207 02 FILLER PICTURE XX VALUE SPACE.
00208 022080 01 HEAOMCDO. CM000095
00209 022090 02 MCDD PICTURE X(12) VALUE ' SCAN '. CM000095
00210 022100 02 FILLER PICTURE X(113) VALUE 'PARAMETER UNIT CODE LOADCM000095
00211 022110- ' CODE LOAD CODE LOAD CODE LOADCM000095
00212 022120- ' REFERENCE REMARKS'. CM000095
00213 022130 02 FILLER PICTURE X(7) VALUE SPACE. CM000095
00214 023010 01 DOAS-HO.
00215 023020 02 FILLER PICTURE X(48) VALUE SPACE.
00216 023030 02 FILLER PICTURE X(31) VALUE 'DIGITAL DATA ACQUISITION S
00217 023040- 'YSTEM'.
00218 023050 02 FILLER PICTURE X(32) VALUE SPACE.
00219 023060 02 FILLER PICTURE X(14) VALUE 'SHEET OF R'.
00220 023070 02 FILLER PICTURE X(7) VALUE SPACE.
00221 023180 01 MC-HD.
00222 023190 02 FILLER PICTURE X(53) VALUE SPACE.
00223 023200 02 FLXR PICTURE X(32) VALUF 'MICROSAOIC DATA REDUCTION
00224 023210- ' '.
00225 023220 02 FILLER PICTURE X(26) VALUE SPACE.

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00226 023230 02 FILLER PICTURE XI14) VALUE 'SHEET OF R'.
00227 023240 02 FILLER PICTURE X(7) VALUE SPACE.
00228 024010 01 DUM-HEAD.
00229 024020 02 SCF PICTURE XI32) VALUE 'SCANNER VALVE DATA REDUCTI
00230 024030- 'ON '.
00231 030010 PROCEDURE DIVISION. CM000095
00232 030021 OPEN OUTPUT LIST.
00233 030100 OPEN INPUT HOOK. CM000095
00234 030110 OPEN INPUT OCARD.
00235 030130 PERFORM SPACE-TB. CM000095
00236 031010 RD-HK. CM000095
00237 031020 READ HOOK AT END GO TO HK-END. CM000095
00238 031070 IF HR1 = 'S' AND HR2 = '0' OR '1' OR '2' OR '3' OR '4' OR CM000095
00239 031080 '5' OR '6' OR '7' OR '8' OR '9' GO TO SV-ROUTE. CM000095
00240 031090 IF HR12 = '00' GO TO MN6. CM000095
00241 031110 GO TO RD-HK. CM000095
00242 032200 MN6. CM000095
00243 ADD 1 RHR45 GIVING K.
00244 IF HHR3 NOT = 0
00245 MOVE HPAR TO 003 (HHR3,K).
00246 032201 CLOSE OCARD.
00247 032210 OPEN INPUT DCARD. CM000095
00248 032220 MN6A. CM000095
00249 032230 READ OCARD AT END GO TO MN1Z. CM000095
00250 032240 IF DR1 NOT = HPAR GO TO MN6A. CM000095
00251 032250 IF DR7 = ' ' GO TO MN1Z. CM000095
00252 033020 GO TO DD-ROUTE. CM000095
00253 033110 MN1Z. CM000095
00254 033120 DISPLAY 'DATA RED. N/A '.
00255 033140 GO TO RD-HK. CM000095
00256 049010 SV-ROUTE. CM000095
00257 049020 IF HRD23 > 60 DISPLAY '4902' HROOUT GO TO RD-HK. CM000095
00258 049030 MOVE HRO23 TO J. CM000095
00259 049040 IF RHR45 > 12 DISPLAY '4904' HROOUT GO TO RD-HK. CM000095
00260 MOVE RHR45 TO K.
00261 049050 MOVE HPAR TO SV3 (J, K) CM000095
00262 049060 GO TO RD-HK. CM000095
00263 050010 DD-ROUTE. CM000095
00264 050011 IF HHR3 = 0 GO TO RD-HK.
00265 050020 IF HHR3 < 8 MOVE HHR3 TO J
00266 050030 ELSE DISPLAY '5003' HROOUT GO TO RD-HK. CM000095
00267 050040 IF RHR45 > 63 DISPLAY '5004' HROOUT GO TO RD-HK.
00268 050050 ADD 1 RHR45 GIVING K.
00269 050070 IF RHR7B = '0' OR '1' OR '2' OR '3' OR '4' OR '5' OR '6' CM000095
00270 050080 OR '7' OR '8' OR '9' GO TO DDR1. CM000095
00271 050090 GO TO DDR3. CM000095
00272 050100 DDR1. CM000095
00273 050110 IF RHR7C = '0' OR '1' OR '2' OR '3' OR '4' OR '5' OR '6' CM000095
00274 050120 OR '7' OR '8' OR '9' GO TO DDR2. CM000095
00275 050130 DDR3. CM000095
00276 050140 IF DR7 = 'IPC' MOVE 'IN PLACE CALS' TO 0016 (J, K) CM000095
00277 050150 GO TO DDR9. CM000095
00278 050160 IF DR7 = 'SPC' MOVE 'SPECIAL CALS' TO 0016 (J, K) CM000095
00279 050170 GO TO DDR9. CM000095
00280 050180 IF RHR7B = 'R' AND RHR7C = 'N' GO TO DDR4. CM000095
00281 050190 DISPLAY '5019' DR7 GO TO RD-HK. CM000095
00282 050200 DDR4. CM000095

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00283 050210 OPEN INPUT CFILE. CM000095
00284 050220 DOR5. CM000095
00285 050230 READ CFILE AT ENO GO TO OOCEND. CM000095
00286 050240 IF C9 NOT = '0' GO TO DOR5.
00287 050250 IF HPAR NOT = C5 GO TO DOR5.
00288 051010 IF RR7A = '+' CM000095
00289 051020 MOVE '26' TO 005 (J, K) CM000095
00290 051030 MOVE '27' TO DD7 (J, K) CM000095
00291 051040 MOVE '28' TO 009 (J, K) CM000095
00292 051050 MOVE '29' TO DD11 (J, K) CM000095
00293 051060 MOVE '30' TO DD13 (J, K) CM000095
00294 051070 GO TO OOR6. CM000095
00295 051080 IF RR7A = '-' CM000095
00296 051090 MOVE '26' TO 005 (J, K) CM000095
00297 051100 MOVE '25' TO DD7 (J, K) CM000095
00298 051110 MOVE '24' TO 009 (J, K) CM000095
00299 051120 MOVE '23' TO DD11 (J, K) CM000095
00300 051130 MOVE '22' TO DD13 (J, K) CM000095
00301 051140 MOVE 1 TO NEG-SW CM000095
00302 051150 GO TO OOR6. CM000095
00303 051160 DISPLAY '5116' OR7 GO TO ODCEND. CM000095
00304 051170 DOR6. CM000095
00305 051180 IF C10 = SPACE GO TO OOR7. CM000095
00306 051190 MOVE C10 TO DD6 (J, K) CM000095
00307 051200 READ CFILE AT END GO TO ODCEND. CM000095
00308 051210 MOVE C10 TO DD8 (J, K) CM000095
00309 051220 READ CFILE AT END GO TO ODCEND. CM000095
00310 051230 MOVE C10 TO DD10 (J, K) CM000095
00311 051240 READ CFILE AT ENO GO TO ODCEND. CM000095
00312 051250 MOVE C10 TO DD12 (J, K) CM000095
00313 052010 READ CFILE AT ENO GO TO ODCEND. CM000095
00314 052020 MOVE C10 TO DD14 (J, K) CM000095
00315 052030 GO TO OOR8. CM000095
00316 052040 OOR7. CM000095
00317 052050 IF C11 = SPACE DISPLAY '5205' C7 GO TO ODCEND. CM000095
00318 052060 MOVE C11 TO DD6 (J, K) CM000095
00319 052070 READ CFILE AT ENO GO TO ODCEND. CM000095
00320 052080 MOVE C11 TO DD8 (J, K) CM000095
00321 052090 READ CFILE AT ENO GO TO ODCEND. CM000095
00322 052100 MOVE C11 TO DD10 (J, K) CM000095
00323 052110 READ CFILE AT ENO GO TO ODCEND. CM000095
00324 052120 MOVE C11 TO DD12 (J, K) CM000095
00325 052130 READ CFILE AT ENO GO TO ODCEND. CM000095
00326 052140 MOVE C11 TO DD14 (J, K) CM000095
00327 052150 OOR8. CM000095
00328 052160 MOVE C11B TO DD4 (J, K) CM000095
00329 053110 CLOSE CFILE. CM000095
00330 **052170 OOR9. CM000095
00331 052180 IF NEG-SW = 1 MOVE 0 TO NEG-SW CM000095
00332 052190 MOVE '-' TO OOSN (J, K) CM000095
00333 053010 IF DR6 = 'CP' MOVE 'CELL PRESS' TO DD15 (J, K) GO TO DORX. CM000095
00334 053020 IF DR6 = 'BA' MOVE 'BAROMETER' TO DD15 (J, K) GO TO DORX. CM000095
00335 053030 IF DR6 = 'VR' MOVE 'VAC. REF.' TO DD15 (J, K) GO TO DORX. CM000095
00336 053040 IF DR6 = 'RT' MOVE 'RTT' TO DD15 (J, K) GO TO DORX. CM000095
00337 053050 IF DR6 = 'CA' MOVE 'CA-1500-F' TO DD15 (J, K) GO TO DORX. CM000095
00338 053060 IF DR6 = 'CC' MOVE 'CC-1500-F' TO DD15 (J, K) GO TO DORX. CM000095
00339 053070 IF DR6 = 'IC' MOVE 'IC-1500-F' TO DD15 (J, K) GO TO DORX. CM000095

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00340 053080 IF OR6 = 'EV' MOVE 'EVENT' TO DD15 (J, K). CM000095
00341 053090 DDRX. CM000095
00342 053100 MOVE HPAR TO DD3 (J, K) CM000095
00343 053120 GO TO RD-HK. CM000095
00344 053130 OOCEND. CM000095
00345 053140 DISPLAY '5314' CM000095
00346 053150 CLOSE CFILE CM000095
00347 053160 GO TO RD-HK, CM000095
00348 054010 DDR2. CM000095
00349 054020 IF RDR78 = 08 GO TO DDR2A. CM000095
00350 054030 IF RDR78 = 16 GO TO DDR2B. CM000095
00351 054040 IF RDR78 = 24 GO TO DDR2C. CM000095
00352 054050 IF RDR78 = 32 GO TO DDR2O. CM000095
00353 054060 IF RDR78 = 40 GO TO DDR2E. CM000095
00354 054070 IF RDR78 = 80 GO TO DDR2F. CM000095
00355 054080 DDR2Z. CM000095
00356 054090 DISPLAY '5409' DR7 GO TO RD-HK. CM000095
00357 054100 DDR2A. CM000095
00358 054110 IF RR7A = '+' CM000095
00359 054120 MOVE '2' TO DD5 (J, K) CM000095
00360 054130 MOVE '0 MV' TO DD6 (J, K) CM000095
00361 054140 MOVE '3' TO DD7 (J, K) CM000095
00362 054150 MOVE '8 MV' TO DD8 (J, K) CM000095
00363 054160 GO TO DDR2O. CM000095
00364 054170 IF RR7A = '-' CM000095
00365 054180 MOVE '2' TO DD5 (J, K) CM000095
00366 054190 MOVE '0 MV' TO DD6 (J, K) CM000095
00367 054200 MOVE '1' TO DD7 (J, K) CM000095
00368 054210 MOVE '-8 MV' TO DD8 (J, K) CM000095
00369 054220 GO TO DDR2O. CM000095
00370 054230 GO TO DDR2Z. CM000095
00371 055010 DDR2B. CM000095
00372 055020 IF RR7A = '+' CM000095
00373 055030 MOVE '5' TO DD5 (J, K) CM000095
00374 055040 MOVE '0 MV' TO DD6 (J, K) CM000095
00375 055050 MOVE '6' TO DD7 (J, K) CM000095
00376 055060 MOVE '16 MV' TO DD8 (J, K) CM000095
00377 055070 GO TO DDR2O. CM000095
00378 055080 IF RR7A = '-' CM000095
00379 055090 MOVE '5' TO DD5 (J, K) CM000095
00380 055100 MOVE '0 MV' TO DD6 (J, K) CM000095
00381 055110 MOVE '4' TO DD7 (J, K) CM000095
00382 055120 MOVE '-16 MV' TO DD8 (J, K) CM000095
00383 055130 GO TO DDR2O. CM000095
00384 055140 GO TO DDR2Z. CM000095
00385 055150 DDR2C. CM000095
00386 055160 IF RR7A = '+' CM000095
00387 055170 MOVE '8' TO DD5 (J, K) CM000095
00388 055180 MOVE '0 MV' TO DD6 (J, K) CM000095
00389 055190 MOVE '9' TO DD7 (J, K) CM000095
00390 055200 MOVE '24 MV' TO DD8 (J, K) CM000095
00391 055210 GO TO DDR2O. CM000095
00392 055220 IF RR7A = '-' CM000095
00393 055230 MOVE '8' TO DD5 (J, K) CM000095
00394 055240 MOVE '0 MV' TO DD6 (J, K) CM000095
00395 055250 MOVE '7' TO DD7 (J, K) CM000095
00396 056010 MOVE '-24 MV' TO DD8 (J, K) CM000095

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00397 056020 GO TO DOR20. CM000095
00398 056030 GO TO DOR22. CM000095
00399 056040 DOR20. CM000095
00400 056050 IF RR7A = '+' CM000095
00401 056060 MOVE '11' TO 005 (J, K) CM000095
00402 056070 MOVE '0 MV' TO 006 (J, K)
00403 056080 MOVE '12' TO 007 (J, K) CM000095
00404 056090 MOVE '32 MV' TO 008 (J, K) CM000095
00405 056100 GO TO DOR20. CM000095
00406 056110 IF RR7A = '-' CM000095
00407 056120 MOVE '11' TO 005 (J, K) CM000095
00408 056130 MOVE '0 MV' TO 006 (J, K) CM000095
00409 056140 MOVE '10' TO 007 (J, K) CM000095
00410 056150 MOVE '-32 MV' TO 008 (J, K) CM000095
00411 056160 GO TO DOR20. CM000095
00412 056170 GO TO DOR22. CM000095
00413 056180 DOR2E. CM000095
00414 056190 IF RR7A = '+' CM000095
00415 056200 MOVE '14' TO 005 (J, K) CM000095
00416 056210 MOVE '0 MV' TO 006 (J, K) CM000095
00417 056220 MOVE '15' TO 007 (J, K) CM000095
00418 056230 MOVE '40 MV' TO 008 (J, K) CM000095
00419 056240 GO TO DOR20. CM000095
00420 057010 IF RR7A = '-' CM000095
00421 057020 MOVE '14' TO 005 (J, K)
00422 057030 MOVE '0 MV' TO 006 (J, K) CM000095
00423 057040 MOVE '13' TO 005 (J, K) CM000095
00424 057050 MOVE '-40 MV' TO 008 (J, K) CM000095
00425 057060 GO TO DOR20. CM000095
00426 057070 GO TO DOR22. CM000095
00427 057080 DOR2F. CM000095
00428 057090 IF RR7A = '+' CM000095
00429 057100 MOVE '17' TO 005 (J, K) CM000095
00430 057110 MOVE '0 MV' TO 006 (J, K) CM000095
00431 057120 MOVE '18' TO 007 (J, K) CM000095
00432 057130 MOVE '80 MV' TO 008 (J, K) CM000095
00433 057140 GO TO DOR20. CM000095
00434 057150 IF RR7A = '-' CM000095
00435 057160 MOVE '17' TO 005 (J, K) CM000095
00436 057170 MOVE '0 MV' TO 006 (J, K) CM000095
00437 057180 MOVE '16' TO 007 (J, K) CM000095
00438 057190 MOVE '-80 MV' TO 008 (J, K) CM000095
00439 057200 GO TO DOR20. CM000095
00440 057210 GO TO DOR22. CM000095
00441 057220 DOR20. CM000095
00442 057230 MOVE 'MV CALS' TO 0016 (J, K). CM000095
00443 057240 GO TO DOR9. CM000095
00444 062010 HK-END. CM000095
00445 062020 CLOSE HOOK. CM000095
00446 069010 WR-DO. CM000095
00447 069020 MOVE 1 TO J. MOVE ' MUX CHAN ' TO MC00. MOVE 25 TO JECT. CM000095
00448 069040 PERFORM WRD01 VARYING J FROM 1 BY 1 UNTIL J = 8 AFTER K FROM
00449 069050 1 BY 1 UNTIL K > 64.
00450 069060 MOVE 24 TO JECT. CM000095
00451 069070 GO TO WR-SR. CM000095
00452 069100 WRD01. CM000095
00453 069110 SUBTRACT 1 FROM K GIVING L002.

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00454 069120 MOVE J TO L001.
00455 069150 MOVE DD3 (J, K) TO LDD3. CM000095
00456 069160 MOVE DD4 (J, K) TO LDD4. CM000095
00457 069170 MOVE DD5 (J, K) TO LDD5. CM000095
00458 069180 MOVE DD6 (J, K) TO LDD6. CM000095
00459 069190 MOVE DD7 (J, K) TO LDD7. CM000095
00460 069200 MOVE DD8 (J, K) TO LDD8. CM000095
00461 069210 MOVE DD9 (J, K) TO LDD9. CM000095
00462 069220 MOVE DD10 (J, K) TO LDD10. CM000095
00463 069230 MOVE DD11 (J, K) TO LDD11. CM000095
00464 069240 MOVE DD12 (J, K) TO LDD12. CM000095
00465 069250 MOVE DD13 (J, K) TO LDD13. CM000095
00466 070010 MOVE DD14 (J, K) TO LDD14. CM000095
00467 070020 MOVE DD15 (J, K) TO LDD15. CM000095
00468 070030 MOVE DD16 (J, K) TO LDD16. CM000095
00469 070040 IF DDSN (J, K) = '-' MOVE '-' TO FILLER1 FILLER2 FILLER3 CM000095
00470 070050 FILLER4 FILLER5 ELSE MOVE SPACE TO FILLER1 FILLER2 CM000095
00471 070060 FILLER3 FILLER4 FILLER5. CM000095
00472 070070 IF K = 1 OR JECT = 25
00473 070071 WRITE LIT FROM DDAS-HD AFTER 0
00474 070080 WRITE LIT FROM HEADCDD AFTER 2
00475 070090 MOVE 0 TO JECT. CM000095
00476 070100 ADD 1 TO JECT. CM000095
00477 070110 WRITE LIT FROM DDLIST AFTER 2. CM000095
00478 073010 SPACE-TB. CM000095
00479 073110 PERFORM SPC-DO VARYING K FROM 1 BY 1 UNTIL K > 64 AFTER CM000095
00480 073120 J FROM 1 BY 1 UNTIL J > 7.
00481 **073090 PERFORM SPC-SV VARYING K FROM 1 BY 1 UNTIL K > 12 AFTER CM000095
00482 073100 J FROM 1 BY 1 UNTIL J > 60. CM000095
00483 074180 SPC-SV. CM000095
00484 074190 MOVE SPACE TO SV3 (J, K). CM000095
00485 074200 SPC-DO. CM000095
00486 074210 MOVE SPACE TO DD1 (J, K), DD2 (J, K), DD3 (J, K) DD4 (J, K). CM000095
00487 074220 DD5 (J, K) DD6 (J, K) DD7 (J, K) DD8 (J, K) CM000095
00488 074230 DD9 (J, K) DD10 (J, K) DD11 (J, K) DD12 (J, K). CM000095
00489 074240 DD13 (J, K) DD14 (J, K) DD15 (J, K) DD16 (J, K) CM000095
00490 074250 DDSN (J, K). CM000095
00491 **071010 WR-SR. CM000095
00492 **067240 MOVE 24 TO JECT. CM000095
00493 057250 MOVE SCF TO FIXR. CM000095
00494 069010 WR-SV. CM000095
00495 PERFORM WRSV1 VARYING J FROM 1 BY 1 UNTIL J > 60. CM000095
00496 **066240 GO TO WR-ALL. CM000095
00497 069060 WRSV1. CM000095
00498 IF J = 1 PERFORM SVTOP.
00499 IF J = 21 PERFORM SVTOP.
00500 IF J = 41 PERFORM SVTOP.
00501 MOVE J TO SVNO.
00502 MOVE SV3 (J, 2) TO PORT2.
00503 MOVE SV3 (J, 3) TO PORT3.
00504 MOVE SV3 (J, 4) TO PORT4.
00505 MOVE SV3 (J, 5) TO PORT5.
00506 MOVE SV3 (J, 6) TO PORT6.
00507 MOVE SV3 (J, 7) TO PORT7.
00508 MOVE SV3 (J, 8) TO PORT8.
00509 MOVE SV3 (J, 9) TO PORT9.
00510 MOVE SV3 (J, 10) TO PORT10.

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00511          MDVE SV3 (J, 11) TO PORT11.
00512          MOVE SV3 (J, 12) TO PORT12.
00513          WRITE LIT FROM SVLINE AFTER 2.
00514          SVTOP.
00515          WRITE LIT FROM SVTOP1 AFTER 0.
00516          WRITE LIT FROM SVTOP2 AFTER 3.
00517          WRITE LIT FROM SVTOP3 AFTER 1.
00518 **067230 WR-ALL.
00519 072040 CLOSE LIST.
00520 072050 CLOSE DCARD.
00521 072060 STOP RUN.

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----- CM000095
----- CM000095
----- CM000095

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00001 001010 IDENTIFICATION DIVISION. CM000049
00002 001020 PROGRAM-ID. 'CM000049'. CM000049
00003 001030 AUTHDR. JACK ROSE. CM000049
00004 001040 INSTALLATION. ARD INC TULLAHOMA TENN. CM000049
00005 001050 DATE-WRITTEN. SEPT 1967. CM000049
00006 001060 DATE-COMPILED. DEC 3, 1969 CM000049
00007 001070 SECURITY. CM000049
00008 001080 REMARKS. THIS PROGRAM PRODUCES A TRANSOUCEER FILE CM000049
00009 001090 TO BE USED BY RTF INSTRUMENT PROGRAM. CM000049
00010 001100 ENVIRONMENT DIVISION. CM000049
00011 001110 CONFIGURATION SECTION. CM000049
00012 001120 SOURCE-COMPUTER. IBM-360 H50. CM000049
00013 001130 OBJECT-COMPUTER. IBM-360 H50. CM000049
00014 001140 INPUT-OUTPUT SECTION. CM000049
00015 001150 FILE-CONTROL. CM000049
00016 001160 SELECT GILMORE ASSIGN 'G001' UTILITY. CM000049
00017 001170 SELECT C-FILE ASSIGN 'C001' UTILITY. CM000049
00018 001180 DATA DIVISION. CM000049
00019 001190 FILE SECTION. CM000049
00020 001200 FD. GILMORE RECORDING F. BLOCK 1 RECORDS RECORD 747 CM000049
00021 001210 LABEL RECORDS STANDARD DATA RECORD GILM. CM000049
00022 002010.01 GILM. CM000049
00023 002020 02 FILLER PICTURE X(10). CM000049
00024 002030 02 INS-NO PICTURE X(16). CM000049
00025 002031 02 RINS-NO REDEFINES INS-NO. CM000049
00026 002032 03 FILLER PICTURE X. CM000049
00027 002033 03 INS-NN PICTURE X(15). CM000049
00028 002040 02 FILLER PICTURE X(6). CM000049
00029 002050 02 MFGR PICTURE X(12). CM000049
00030 002060 02 MATE PICTURE X(20). CM000049
00031 002070 02 RANGE. CM000049
00032 002071 03 RG1 PICTURE X. CM000049
00033 002072 03 RG2 PICTURE X. CM000049
00034 002073 03 RG3 PICTURE X. CM000049
00035 002074 03 RG4 PICTURE X. CM000049
00036 002075 03 RG5 PICTURE X. CM000049
00037 002080 02 RANGE-UNIT PICTURE X(12). CM000049
00038 002090 02 PIC PICTURE X. CM000049
00039 002100 02 FILLER PICTURE X(13). CM000049
00040 002110 02 NIC PICTURE X. CM000049
00041 002120 02 FILLER PICTURE X(11). CM000049
00042 002130 02 POC PICTURE X. CM000049
00043 002140 02 FILLER PICTURE X. CM000049
00044 002150 02 FACILITY PICTURE XXXX. CM000049
00045 002160 02 NOC PICTURE X. CM000049
00046 002170 02 FILLER PICTURE X(16). CM000049
00047 002180 02 DATE-CAL. CM000049
00048 002181 03 OCMD PICTURE 99. CM000049
00049 002182 03 OCOY PICTURE 99. CM000049
00050 002183 03 DCYR PICTURE 99. CM000049
00051 002184 02 RDATE REDEFINES DATE-CAL PICTURE X(16). CM000049
00052 002190 02 EXCITATION PICTURE S99V99. CM000049
00053 002200 02 FILLER PICTURE X(299). CM000049
00054 002210 02 R-CAL-TYPE PICTURE XXX. CM000049

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00055	002220	02	FILLER	PICTURE	X(53).	CM000049
00056	002230	02	CORR-P-UN	PICTURE	X.	CM000049
00057	003010	02	RNO.			CM000049
00058	003020	03	RNO-MVV	PICTURE	S9(5)V9.	CM000049
00059	003030	03	RNO-FS	PICTURE	S9(7)V999.	CM000049
00060	003040	03	RNO-PSI	PICTURE	S9(5)V99.	CM000049
00061	003050	02	RN1.			CM000049
00062	003060	03	RN1-RES	PICTURE	S9(5)V999.	CM000049
00063	003070	03	RN1-MVV	PICTURE	S9(5)V999.	CM000049
00064	003080	03	RN1-FS	PICTURE	S9(5)V99.	CM000049
00065	003090	03	RN1-PSI	PICTURE	S9(6)V999.	CM000049
00066	003100	02	RN2.			CM000049
00067	003110	03	RN2-RES	PICTURE	S9(5)V999.	CM000049
00068	003120	03	RN2-MVV	PICTURE	S9(5)V999.	CM000049
00069	003130	03	RN2-FS	PICTURE	S9(5)V99.	CM000049
00070	003140	03	RN2-PSI	PICTURE	S9(6)V999.	CM000049
00071	003150	02	RN3.			CM000049
00072	003160	03	RN3-RES	PICTURE	S9(5)V999.	CM000049
00073	003170	03	RN3-MVV	PICTURE	S9(5)V999.	CM000049
00074	003180	03	RN3-FS	PICTURE	S9(5)V99.	CM000049
00075	003190	03	RN3-PSI	PICTURE	S9(6)V999.	CM000049
00076	003200	02	RN4.			CM000049
00077	003210	03	RN4-RES	PICTURE	S9(5)V999.	CM000049
00078	003220	03	RN4-MVV	PICTURE	S9(5)V999.	CM000049
00079	003230	03	RN4-FS	PICTURE	S9(5)V99.	CM000049
00080	003240	03	RN4-PSI	PICTURE	S9(6)V999.	CM000049
00081	004010	02	RNOO-MV	PICTURE	S9(5)V9.	CM000049
00082	004020	02	RNOO-FS	PICTURE	S9(7)V999.	CM000049
00083	004030	02	RNOO-PSI	PICTURE	S9(5)V99.	CM000049
00084	004040	02	FILLER	PICTURE	X(77).	CM000049
00085	004050	FD	C-FILE	RECORDING F	BLOCK 1 RECORDS	RECORD 80
00086	004060			LABEL RECORDS	STANDARD	DATA RECORD CFLL.
00087		01	CFLL	PICTURE	X(80).	CM000049
00088	005001		WORKING-STORAGE SECTION.			
00089	005010	77	CNOT	PICTURE	9999	VALUE 0.
00090	005019	01	CHANGE-RANGE.			
00091	005020	02	CAT-RNG.			
00092	005030	03	CRG1	PICTURE	X.	
00093	005040	03	CRG2	PICTURE	X.	
00094	005050	03	CRG3	PICTURE	X.	
00095	005060	03	CRG4	PICTURE	X.	
00096	005070	03	CRG5	PICTURE	X.	
00097	**004070	01	CFLL.			CM000049
00098	004080	02	CNO	PICTURE	ZZZZ.	CM000049
00099	004090	02	CCNT	PICTURE	9.	CM000049
00100	004100	02	CTYPCO	PICTURE	X(7).	CM000049
00101	004110	02	CRANGE	PICTURE	X(7).	CM000049
00102	004120	02	CRNUNIT	PICTURE	XXX.	CM000049
00103	004130	02	CRNGCODE	PICTURE	X.	CM000049
00104	004140	02	CPARM	PICTURE	X(9).	CM000049
00105	004150	02	CMFG	PICTURE	X(9).	CM000049
00106	004160	02	CARONO	PICTURE	X(6).	CM000049
00107	004170	02	CAROCOD	PICTURE	X.	CM000049
00108	004180	02	CUDC	PICTURE	X(4).	CM000049
00109	004190	02	CRN	PICTURE	X.	CM000049
00110	004200	02	CPOSRN	PICTURE	X(9).	CM000049
00111	004201	02	RCPOSRN	REDEFINES CPOSRN	PICTURE	-9999.999.

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00112	004220	02 CNEGRN	PICTURE X(9).	CM000049
00113	**004210	02 CPEQ	PICTURE XXX.	CM000049
00114	004240	02 RECAL	PICTURE X(6).	CM000049
00115	006010	PROCEDURE DIVISION.		CM000049
00116	006020	OPEN INPUT GILMORE OUTPUT C-FILE.		CM000049
00117	006030	PERFORM P9.		CM000049
00118	006040	MOVE SPACE TO CARONO.		
00119	006050	READ-GIL.		CM000049
00120	006060	READ GILMORE AT END GO TO G-EOF.		CM000049
00121	006061	IF FACILITY = 'RNOO' OR FACILITY = 'RN10' NEXT SENTENCE		
00122	006062	ELSE GO TO READ-GIL.		
00123	006069	MOVE SPACE TO CAT-RNG.		
00124	006070	IF RG1 = SPACE		
00125	006071	IF RG2 = SPACE		
00126	006072	IF RG3 = SPACE		
00127	006073	IF RG4 = SPACE		
00128	006074	IF RG5 = SPACE		
00129	006075	MOVE RANGE TO CAT-RNG		
00130	006076	ELSE MOVE RG5 TO CAT-RNG		
00131	006077	ELSE MOVE RG4 TO CRG1 MOVE RG5 TO CRG2		
00132	006078	ELSE MOVE RG3 TO CRG1 MOVE RG4 TO CRG2 MOVE RG5 TO CRG3		---
00133	006079	ELSE MOVE RG2 TO CRG1 MOVE RG3 TO CRG2 MOVE RG4 TO CRG3		
00134	006080	MOVE RG5 TO CRG4		
00135	006081	ELSE MOVE RANGE TO CAT-RNG.		
00136	006082	MOVE CAT-RNG TO CRANGE.		
00137	006090	MOVE MFGR TO CMFG.		CM000049
00138	006100	MOVE INS-NN TO CARONO.		
00139	006110	IF EXCITATION = 10.00 AND R-CAL-TYPE = 'D '		CM000049
00140	006120	MOVE 'OS ' TO CUOC GO TO P8.		CM000049
00141	006130	IF EXCITATION = 5.00 AND R-CAL-TYPE = 'D '		CM000049
00142	006140	MOVE 'OS2 ' TO CUOC GO TO P8. MOVE ' ' TO CUOC.		CM000049
00143	006141	P8.	IF ROATE = SPACE GO TO P2.	CM000049
00144	006150	IF DCMD < 7 ADD 6 DCMD GIVING DCMD		
00145	006160	GO TO P2.		CM000049
00146	006170	SUBTRACT 6 FROM DCMD GIVING DCMD		CM000049
00147	006180	ADD 1 DCYR GIVING DCYR.		
00148	006190	P2.		CM000049
00149	006200	MOVE ROATE TO RECAL.		
00150	007010	IF MATE = 'CA3106E-14S-5S-F43 '		CM000049
00151	007020	AND PIC = 'A' AND NIC = 'D' AND POC = 'B' AND NOC = 'C'		CM000049
00152	007030	MOVE 'DUCER-5' TO CTYPCO GO TO P3.		CM000049
00153	007040	IF MATE = 'CA3106E-14S-5S-F43 '		CM000049
00154	007050	AND PIC = 'A' AND NIC = 'D' AND POC = 'C' AND NOC = 'B'		CM000049
00155	007060	MOVE 'DUCR-5A' TO CTYPCO GO TO P3.		CM000049
00156	007070	IF MATE = 'CA3106E-14S-5S-F43 '		CM000049
00157	007080	AND PIC = 'D' AND NIC = 'C' AND POC = 'A' AND NOC = 'B'		CM000049
00158	007090	MOVE 'DUCR-5B' TO CTYPCO GO TO P3.		CM000049
00159	007100	IF MATE = 'PT06A-10-6S(SR) '		CM000049
00160	007110	AND PIC = 'A' AND NIC = 'D' AND POC = 'B' AND NOC = 'C'		CM000049
00161	007120	MOVE 'DUCR-6' TO CTYPCO GO TO P3.		CM000049
00162	007130	IF MATE = 'PT06A-10-6S(SR) '		CM000049
00163	007140	AND PIC = 'A' AND NIC = 'D' AND POC = 'C' AND NOC = 'B'		CM000049
00164	007150	MOVE 'DUCR-6A' TO CTYPCO GO TO P3.		CM000049
00165	007160	IF MATE = 'PT06A-10-6S(SR) '		CM000049
00166	007170	AND PIC = 'D' AND NIC = 'C' AND POC = 'A' AND NOC = 'B'		CM000049
00167	007180	MOVE 'DUCR-6B' TO CTYPCO GO TO P3.		CM000049
00168	007190	IF MATE = 'MS3106B-14S-2S '		CM000049

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00169	007200	AND PIC = 'A' AND NIC = 'O' AND POC = 'B' AND NOC = 'C' ..	CM000049
00170	007210	MOVE 'OUCER-4' TO CTYPCO GO TO P3.	CM000049
00171	007220	IF MATE = 'MS3106B-14S-2S	CM000049
00172	007230	AND PIC = 'A' AND NIC = 'O' AND POC = 'C' AND NOC = 'B'	CM000049
00173	007240	MOVE 'OUCR-4A' TO CTYPCO GO TO P3.	CM000049
00174	008010	IF MATE = 'MS3106B-14S-2S	CM000049
00175	008020	AND PIC = 'O' AND NIC = 'C' AND POC = 'A' AND NOC = 'B' ..	CM000049
00176	008030	MOVE 'OUCR-4B' TO CTYPCD GO TO P3.	CM000049
00177	008040	IF MATE = 'PT06A-8-4S(SR)	CM000049
00178	008050	AND PIC = 'A' AND NIC = 'O' AND POC = 'B' AND NOC = 'C'	CM000049
00179	008060	MOVE 'OUCER40' TO CTYPCO GO TO P3.	CM000049
00180	008070	IF MATE = 'PT06A-8-4S(SR)	CM000049
00181	008080	AND PIC = 'A' AND NIC = 'O' AND POC = 'C' AND NOC = 'B'	CM000049
00182	008090	MOVE 'OUCR40A' TO CTYPCO GO TO P3.	CM000049
00183	008100	IF MATE = 'PT06A-8-4S(SR)	CM000049
00184	008110	AND PIC = 'O' AND NIC = 'C' AND POC = 'A' AND NOC = 'B'	CM000049
00185	*008110	MOVE 'OUCR40B' TO CTYPCO GO TO P3.	CM000049
00186	008120	IF MATE = 'CA3106E-14S-6S-F43	CM000049
00187	008130	AND PIC = 'A' AND NIC = 'O' AND POC = 'B' AND NOC = 'C'	CM000049
00188	008140	MOVE 'OUCER60' TO CTYPCO GO TO P3.	CM000049
00189	008150	IF MATE = 'CA3106E-14S-6S-F43	CM000049
00190	008160	AND PIC = 'A' AND NIC = 'O' AND POC = 'C' AND NOC = 'B'	CM000049
00191	008170	MOVE 'OUCR60A' TO CTYPCO GO TO P3.	CM000049
00192	008180	IF MATE = 'CA3106E-14S-6S-F43	CM000049
00193	008190	AND PIC = 'O' AND NIC = 'C' AND POC = 'A' AND NOC = 'B'	CM000049
00194	008200	MOVE 'OUCR60B' TO CTYPCO GO TO P3.	CM000049
00195	008220	IF MATE = 'PT06E-12-10S(SR)	CM000049
00196	008230	AND PIC = 'A' AND NIC = 'O' AND POC = 'B' AND NOC = 'C'	CM000049
00197	008240	MOVE 'OUCER10' TO CTYPCO GO TO P3.	CM000049
00198	009010	IF MATE = 'PT06E-12-10S(SR)	CM000049
00199	009020	AND PIC = 'A' AND NIC = 'O' AND POC = 'C' AND NOC = 'B'	CM000049
00200	009030	MOVE 'OUCR10A' TO CTYPCO GO TO P3.	CM000049
00201	009040	IF MATE = 'PT06E-12-10S(SR)	CM000049
00202	009050	AND PIC = 'O' AND NIC = 'C' AND POC = 'A' AND NOC = 'B'	CM000049
00203	009060	MOVE 'OUCR10B' TO CTYPCO GO TO P3.	CM000049
00204		IF MATE = 'PC06-12-10S	
00205		AND PIC = 'A' AND NIC = 'O' AND POC = 'B' AND NOC = 'C'	
00206		MOVE 'OUCR10C' TO CTYPCO GO TO P3.	
00207		IF MATE = 'PC06-12-10S	
00208		AND PIC = 'E' AND NIC = 'B' AND POC = 'D' AND NOC = 'A'	
00209		MOVE 'OUCR100' TO CTYPCO GO TO P3.	
00210	009070	IF MATE = 'PC06W-8-4S	CM000049
00211	009080	AND PIC = 'A' AND NIC = 'O' AND POC = 'B' AND NOC = 'C'	CM000049
00212	009090	MOVE 'OUCER41' TO CTYPCO GO TO P3.	CM000049
00213	009100	IF MATE = 'PC06W-8-4S	CM000049
00214	009110	AND PIC = 'A' AND NIC = 'O' AND POC = 'C' AND NOC = 'B'	CM000049
00215	009120	MOVE 'OUCR41A' TO CTYPCD GO TO P3.	CM000049
00216	009130	IF MATE = 'PC06W-8-4S	CM000049
00217	009140	AND PIC = 'O' AND NIC = 'C' AND POC = 'A' AND NOC = 'B'	CM000049
00218	009150	MOVE 'OUCR41B' TO CTYPCD GO TO P3.	CM000049
00219	009160	MOVE 'NON-STO' TO CTYPCO.	CM000049
00220	009170 P3.	IF CORR-P-UN = 'A' MOVE 'PSA' TO CPEQ.	CM000049
00221	009180	IF CORR-P-UN = 'G' MOVE 'PSG' TO CPEQ.	CM000049
00222	009190	IF CORR-P-UN = 'O' MOVE 'PSO' TO CPEQ.	CM000049
00223	009200	IF RANGE-UNIT = 'ABSOLUTE' MOVE 'PSA' TO CRNUNIT	CM000049
00224	009201	GO TO P4.	CM000049
00225	009210	IF RANGE-UNIT = 'GAGE' MOVE 'PSG' TO CRNUNIT	CM000049

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00226	009211	GO TO P4.	CM000049
00227	009220	IF RANGE-UNIT = ' UNIOIR DIFF' MOVE 'PSO' TO CRNUNIT	CM000049
00228	009221	GO TO P4.	CM000049
00229	009230	IF RANGE-UNIT = ' BIOIR DIFF.' MOVE 'PSO' TO CRNUNIT	CM000049
00230	009231	GO TO P4.	CM000049
00231	009240	MOVE 'N/A' TO CRNUNIT.	CM000049
00232	009250	P4.	CM000049
00233	010030	MOVE 5 TO CCNT.	CM000049
00234	010040	MOVE '0' TO CRN.	CM000049
00235	010050	MOVE 'N/A' TO CPOSRN.	
00236		WRITE CFLL FROM CFIL.	
00237		DISPLAY CFIL.	
00238	010080	P9.	CM000049
00239	010090	MOVE SPACE TO CTYPCO CRANGE CRNUNIT CRNGCODE CPARM CMFG	CM000049
00240	010100	CAROCO CUDC CNEGRN RECAL.	
00241	010101	MOVE 0 TO CNO.	
00242	010110	P10.	CM000049
00243	010120	MOVE 4 TO CCNT.	CM000049
00244	010130	MOVE '1' TO CRN.	CM000049
00245	010160	IF RN1-PSI = 999999.999 MOVE 'N/A' TO CPOSRN	CM000049
00246	010170	ELSE MOVE RN1-PSI TO RCPOSRN.	CM000049
00247		WRITE CFLL FROM CFIL.	
00248		DISPLAY CFIL.	
00249	010190	IF RN2-PSI = 999999.999 MOVE 'N/A' TO CPOSRN	CM000049
00250	010200	ELSE MOVE RN2-PSI TO RCPOSRN.	CM000049
00251	010210	MOVE 3 TO CCNT.	CM000049
00252	010220	MOVE '2' TO CRN.	CM000049
00253		WRITE CFLL FROM CFIL.	
00254		DISPLAY CFIL.	
00255	010240	IF RN3-PSI = 999999.999 MOVE 'N/A' TO CPOSRN	CM000049
00256	010250	ELSE MOVE RN3-PSI TO RCPOSRN.	CM000049
00257	011010	MOVE 2 TO CCNT.	CM000049
00258	011020	MOVE '3' TO CRN.	CM000049
00259		WRITE CFLL FROM CFIL.	
00260		DISPLAY CFIL.	
00261	011040	IF RN4-PSI = 999999.999 MOVE 'N/A' TO CPOSRN	CM000049
00262	011050	ELSE MOVE RN4-PSI TO RCPOSRN.	CM000049
00263	011060	MOVE 1 TO CCNT.	CM000049
00264	011070	MOVE '4' TO CRN.	CM000049
00265		WRITE CFLL FROM CFIL.	
00266		DISPLAY CFIL.	
00267	011090	PERFORM P9.	CM000049
00268	011100	GO TO READ-GIL.	CM000049
00269	011150	G-EOF.	CM000049
00270	011160	CLOSE GILMORE C-FILE. STOP RUN.	CM000049

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00001 001010 IDENTIFICATION DIVISION. CM000057
00002 001020 PROGRAM-IO, 'CM000138'.
00003 001030 AUTHOR. JACK ROSE. CM000057
00004 001040 INSTALLATION. ARO INC. CM000057
00005 001050 DATE-WRITTEN. JULY 1969.
00006 001060 DATE-COMPILED. SEP. 16, 1969.
00007 001070 SECURITY. CM000057
00008 001090 ENVIRONMENT DIVISION. CM000057
00009 001100 CONFIGURATION SECTION. CM000057
00010 001110 SOURCE-COMPUTER. IBM-360 H50. CM000057
00011 001120 OBJECT-COMPUTER. IBM-360 H50. CM000057
00012 001130 INPUT-OUTPUT SECTION. CM000057
00013 001140 FILE-CONTROL. CM000057
00014 001150 SELECT C-FILE ASSIGN 'CF001' UTILITY. CM000057
00015 001150 SELECT OUTFILE ASSIGN 'CFOUT' UTILITY.
00016 001220 DATA DIVISION. CM000057
00017 001230 FILE SECTION.
00018 002010 FO C-FILE RECORDING F BLOCK 1 RECORDS RECORD 80 CM000057
00019 002020 LABEL RECORDS OMITTED DATA RECORD C-FIL. CM000057
00020 002030 01 C-FIL. CM000057
00021 002031 02 CF-TC PICTURE X. CM000057
00022 002040 02 CF-NO PICTURE XXX. CM000057
00023 002050 02 CF-CNT PICTURE 9. CM000057
00024 002060 02 CF-TYPECO PICTURE X(7). CM000057
00025 002070 02 CF-RNG PICTURE X(7). CM000057
00026 002080 02 CF-RNGU PICTURE XXX. CM000057
00027 002090 02 CF-RNGCO PICTURE X. CM000057
00028 002100 02 CF-PARM PICTURE X(9). CM000057
00029 002110 02 CF-MFG PICTURE X(9). CM000057
00030 002120 02 CF-INO PICTURE X(6). CM000057
00031 002130 02 CF-INOCO PICTURE X. CM000057
00032 002140 02 CF-UOC PICTURE X(4). CM000057
00033 002150 02 CF-RN PICTURE X. CM000057
00034 002160 02 CF-POS PICTURE X(9). CM000057
00035 002170 02 CF-NEG PICTURE X(9). CM000057
00036 002180 02 CF-EQU PICTURE XXX. CM000057
00037 002190 02 CF-RCAL PICTURE X(6). CM000057
00038 002200 FO OUTFILE
00039 002210 RECORDING F
00040 002220 BLOCK 1 RECORDS
00041 002230 RECORD 87
00042 002240 LABEL RECORDS STANDARD
00043 002250 DATA RECORD CFNEW.
00044 002260 01 CFNEW.
00045 002270 02 TC PICTURE X.
00046 002280 02 NR PICTURE XXX.
00047 002290 02 CNT PICTURE 9.
00048 002300 02 TYPECO PICTURE X(7).
00049 002310 02 RNG PICTURE X(7).
00050 002320 02 RNGU PICTURE XXX.
00051 002330 02 RNGCO PICTURE X.
00052 002340 02 PARM PICTURE X(9).
00053 002350 02 MFG PICTURE X(9).
00054 002360 02 INO PICTURE X(6).

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00055----- 02 INOCD PICTURE X.
00056----- 02 UDC PICTURE X(4).
00057----- 02 RN PICTURE X.
00058----- 02 POS PICTURE X(9).
00059----- 02 NEG PICTURE X(9).
00060----- 02 EQU PICTURE XXX.
00061----- 02 RCAL PICTURE X(6).
00062----- 02 RSORT PICTURE X(7).
00063 007010 WORKING-STORAGE SECTION.
00064 77 HOLD-RNG PICTURE X(7).
00065 77 HOLD-INO PICTURE X(6).
00066 012010 PROCEDURE DIVISION.
00067 OPEN INPUT C-FILE.
00068 OPEN OUTPUT OUTFILE.
00069 1. READ C-FILE AT END GO TO 99.
00070 MOVE CF-RNG TO HOLD-RNG.
00071 MOVE CF-INO TO HOLD-INO.
00072 PERFORM MOVE-DATA.
00073 2. READ C-FILE AT END GO TO 99.
00074 IF CF-RN NOT = '0' GO TO 2.
00075 IF CF-INO = HOLD-INO PERFORM MOVE-DATA. GO TO 2.
00076 MOVE CF-INO TO HOLD-INO.
00077 MOVE CF-RNG TO HOLD-RNG.
00078 PERFORM MOVE-DATA.
00079 GO TO 2.
00080 MOVE-DATA.
00081 MOVE CF-TC TO TC.
00082 MOVE CF-NO TO NR.
00083 MOVE CF-CNT TO CNT.
00084 MOVE CF-TYPCO TO TYPCD.
00085 MOVE CF-RNG TO RNG.
00086 MOVE CF-RNGU TO RNGU.
00087 MOVE CF-RNGCD TO RNGCD.
00088 MOVE CF-PARM TO PARM.
00089 MOVE CF-MFG TO MFG.
00090 MOVE HOLD-INO TO INO.
00091 MOVE CF-INOCD TO INOCD.
00092 MOVE CF-UDC TO UDC.
00093 MOVE CF-RN TO RN.
00094 MOVE CF-POS TO POS.
00095 MOVE CF-NEG TO NEG.
00096 MOVE CF-EQU TO EQU.
00097 MOVE CF-RCAL TO RCAL.
00098 MOVE HOLD-RNG TO RSORT.
00099 WRITE CFNEW.
00100 99.
00101 CLOSE C-FILE.
00102 CLOSE OUTFILE.
00103 STOP RUN.

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CM000057

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00001 001010 IDENTIFICATION DIVISION. CM000057
00002 001020 PROGRAM-IO. 'CM000133'.
00003 001030 AUTHOR. JACK ROSE. CM000057
00004 001040 INSTALLATION. ARO INC. CM000057
00005 DATE-WRITTEN. JULY 1969.
00006 001060 DATE-COMPILED. SEP 17, 1969
00007 001070 SECURITY. CM000057
00008 REMARKS. THIS PROGRAM LISTS A SORTED RTF TOCR FILE.
00009 001090 ENVIRONMENT DIVISION. CM000057
00010 001100 CONFIGURATION SECTION. CM000057
00011 001110 SOURCE-COMPUTER. IBM-360 H50. CM000057
00012 001120 OBJECT-COMPUTER. IBM-360 H50. CM000057
00013 001130 INPUT-OUTPUT SECTION. CM000057
00014 001140 FILE-CONTROL. CM000057
00015 001150 SELECT C-FILE ASSIGN 'CF001' UTILITY. CM000057
00016 001200 SELECT LISTING ASSIGN 'LT001' UTILITY. CM000057
00017 001220 DATA DIVISION. CM000057
00018 001230 FILE SECTION.
00019 002010 FD C-FILE RECORDING F BLOCK 1 RECORDS RECORD 87 CM000057
00020 002020 LABEL RECORDS OMITTED DATA RECORD C-FIL. CM000057
00021 002030 01 C-FIL. CM000057
00022 002031 02 CF-TC PICTURE X. CM000057
00023 002040 02 CF-NO PICTURE XXX. CM000057
00024 002050 02 CF-CNT PICTURE 9. CM000057
00025 002060 02 CF-TYPCD PICTURE X(7). CM000057
00026 002070 02 CF-RNG PICTURE X(7). CM000057
00027 002080 02 CF-RNGU PICTURE XXX. CM000057
00028 002090 02 CF-RNGCO PICTURE X. CM000057
00029 002100 02 CF-PARM PICTURE X(9). CM000057
00030 002110 02 CF-MFG PICTURE X(9). CM000057
00031 002120 02 CF-INO PICTURE X(6). CM000057
00032 002130 02 CF-INOCO PICTURE X. CM000057
00033 002140 02 CF-UDC PICTURE X(4). CM000057
00034 002150 02 CF-RN PICTURE X. CM000057
00035 002160 02 CF-POS PICTURE X(9). CM000057
00036 002170 02 CF-NEG PICTURE X(9). CM000057
00037 002180 02 CF-EQU PICTURE XXX. CM000057
00038 002190 02 CF-RCAL PICTURE X(6). CM000057
00039 002190 02 CF-JUNK PICTURE X(7).
00040 006060 FD LISTING RECORDING F BLOCK 12 RECORDS RECORD 132
00041 006070 LABEL RECORDS OMITTED DATA RECORD LIST. CM000057
00042 006080 01 LIST PICTURE X(132). CM000057
00043 007010 WORKING-STORAGE SECTION. CM000057
00044 007070 77 SKP PICTURE X VALUE '0'.
00045 007080 77 EJCT PICTURE 99 VALUE 59. CM000057
00046 007090 77 OSKP PICTURE X VALUE '0'.
00047 008081 01 DATALN. CM000057
00048 008082 02 FILLER PICTURE X(4) VALUE SPACE. CM000057
00049 008090 02 LTC PICTURE X. CM000057
00050 008100 02 FILLER PICTURE X(4) VALUE SPACE. CM000057
00051 008110 02 LTYPCO PICTURE X(7). CM000057
00052 008120 02 FILLER PICTURE X(4) VALUE SPACE. CM000057
00053 008130 02 LRNG PICTURE X(7). CM000057
00054 008140 02 FILLER PICTURE X(3) VALUE SPACE. CM000057

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00055	008150	02	LRNGU	PICTURE XXX.		CM000057
00056	008160	02	FILLER	PICTURE XXX VALUE SPACE.		CM000057
00057	008170	02	LRNGCO	PICTURE X.		CM000057
00058	008180	02	FILLER	PICTURE XXX VALUE SPACE.		CM000057
00059	008190	02	LPARM	PICTURE X(9).		CM000057
00060	008200	02	FILLER	PICTURE XXX VALUE SPACE.		CM000057
00061	008210	02	LMFG	PICTURE X(9).		CM000057
00062	008220	02	FILLER	PICTURE XXX VALUE SPACE.		CM000057
00063	008230	02	LINO	PICTURE X(6).		CM000057
00064	008240	02	FILLER	PICTURE XXX VALUE SPACE.		CM000057
00065	008250	02	LINCO	PICTURE X.		CM000057
00066	009010	02	FILLER	PICTURE XXX VALUE SPACE.		CM000057
00067	009020	02	LUOC	PICTURE XXXX.		CM000057
00068	009030	02	FILLER	PICTURE XXXX VALUE SPACE.		CM000057
00069	009040	02	LRN	PICTURE X.		CM000057
00070	009050	02	FILLER	PICTURE XXXX VALUE SPACE.		CM000057
00071	009060	02	LPOS	PICTURE X(9).		CM000057
00072	009070	02	FILLER	PICTURE XXX VALUE SPACE.		CM000057
00073	009080	02	LNFG	PICTURE X(9).		CM000057
00074	009090	02	FILLER	PICTURE XXX VALUE SPACE.		CM000057
00075	009100	02	LEQU	PICTURE XXX.		CM000057
00076	009110	02	FILLER	PICTURE XXX VALUE SPACE.		CM000057
00077	009120	02	LRCAL	PICTURE X(6).		CM000057
00078	009130	02	FILLER	PICTURE X(6) VALUE SPACE.		CM000057
00079	009180	01	F-PAGE.			CM000057
00080	009190	02	FILLER	PICTURE X(60) VALUE SPACE.		CM000057
00081	009200	02	FILLER	PICTURE X(6) VALUE 'C-FILE'.		CM000057
00082	009210	02	FILLER	PICTURE X(66) VALUE SPACE.		CM000057
00083	010010	01	HEADER.			CM000057
00084	010020	02	FILLER	PICTURE X(99) VALUE ' CELL TYPE CD RANGE		CM000057
00085	010030	'	UNIT CODE PARAMETER	MFG	ARO I-NO CODE UOC	RNCM000057
00086	010040	'	POS RN	'		CM000057
00087	010050	02	FILLER	PICTURE X(33) VALUE ' NEG RN UNITS R DATE		CM000057
00088	010060	'				CM000057
00089	012010		PROCEDURE DIVISION.			CM000057
00090		1.				
00091			OPEN INPUT C-FILE.			
00092			OPEN OUTPUT LISTING.			
00093			WRITE LIST FROM F-PAGE AFTER 0.			
00094		2.				
00095			REAO C-FILE AT END GO TO 99.			
00096			IF CF-RN NOT = '0' GO TO 2.			
00097	018200		IF EJCT > 52 MOVE 0 TO EJCT			CM000057
00098	018210		WRITE LIST FROM HEADER AFTER SKP			CM000057
00099	018211		MOVE '0' TO DSKP			
00100	018220		MOVE '1' TO SKP.			
00101	**017150		MOVE CF-TC TO LTC.			CM000057
00102	017160		MOVE CF-TYPCO TO LTYPCO.			CM000057
00103	017170		MOVE CF-RNG TO LRNG.			CM000057
00104	017180		MOVE CF-RNGU TO LRNGU.			
00105	017190		MOVE CF-RNGCO TO LRNGCO.			CM000057
00106	017200		MOVE CF-PARM TO LPARM			CM000057
00107	017210		MOVE CF-MFG TO LMFG.			CM000057
00108	017220		MOVE CF-LNO TO LINO.			CM000057
00109	017230		MOVE CF-INOCO TO LINOCO.			CM000057
00110	017240		MOVE CF-UOC TO LUOC.			CM000057
00111	017250		MOVE CF-RN TO LRN.			CM000057

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00112	018010	MOVE CF-POS TO LPOS.	CM000057
00113	018020	MOVE CF-NEG TO LNEG.	CM000057
00114	018030	MOVE CF-EQU TO LEQU.	CM000057
00115	018040	MOVE CF-RCAL TO LRCAL.	CM000057
00116	018050	WRITE LIST FROM DATA LN AFTER DSKP.	
00117		ADD 2 TO EJCT.	
00118		GO TO 2.	
00119	99.		
00120		CLOSE C-FILE LISTING.	
00121		STOP RUN.	

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00001	00101	IDENTIFICATION DIVISION.	CM000082
00002	00102	PROGRAM-ID. 'CM000082'.	CM000082
00003	00103	AUTHDR. ROSE.	CM000082
00004	00104	INSTALLATION. ARO INC TULLAHOMA TENN.	CM000082
00005	00105	DATE-WRITTEN.	CM000082
00006	00106	DATE-COMPILED. JAN 6, 1970	CM000082
00007	00107	SECURITY.	CM000082
00008	00108	REMARKS. PROGRAM UPDATES RTF C-FILE.	CM000082
00009	00109	ENVIRONMENT DIVISION.	CM000082
00010	00110	CONFIGURATION SECTION.	CM000082
00011	00111	SOURCE-COMPUTER. IBM-360.	CM000082
00012	00112	OBJECT-COMPUTER. IBM-360.	CM000082
00013	00113	INPUT-OUTPUT SECTION.	CM000082
00014	00114	FILE-CONTROL.	CM000082
00015	00115	SELECT GILMORE ASSIGN 'GILIN' UTILITY.	CM000082
00016	00116	SELECT C-FILE ASSIGN 'CFIL' UTILITY.	CM000082
00017	00117	SELECT NEW-ONE ASSIGN 'NUREC' UTILITY.	CM000082
00018	001171	SELECT LISTING ASSIGN 'OOLIST' UTILITY.	CM000082
00019	001172	SELECT OPCARO ASSIGN 'DP001' UTILITY.	CM000082
00020	00119	DATA DIVISION.	CM000082
00021	00120	FILE SECTION.	CM000082
00022	00201	FD GILMDRE RECORDING F BLDCK 1 RECORDS RECORD 80	CM000082
00023	00202	LABEL RECORDS STANDARD DATA RECORD GILM.	CM000082
00024	00203	01 GILM.	CM000082
00025	00204	02 G-CND PICTURE X(4).	CM000082
00026		02 GCELL REDEFINES G-CND.	
00027		03 GA PICTURE X.	
00028		03 G2 PICTURE XXX.	
00029	00205	02 G-CNT PICTURE 9.	CM000082
00030	00206	02 G-TYPEC PICTURE X(7).	CM000082
00031	00207	02 G-RANGE PICTURE X(7).	CM000082
00032	00208	02 G-RUNIT PICTURE XXX.	CM000082
00033	00209	02 G-RCODE PICTURE X.	CM000082
00034	00210	02 G-PARM PICTURE X(9).	CM000082
00035	00211	02 G-MFG PICTURE X(9).	CM000082
00036	00212	02 G-AROND PICTURE X(6).	CM000082
00037	00213	02 G-AROCN PICTURE X.	CM000082
00038	00214	02 G-UDC PICTURE XXXX.	CM000082
00039	00215	02 G-RN PICTURE X.	CM000082
00040	00216	02 G-POS PICTURE X(9).	CM000082
00041	00217	02 G-NEG PICTURE X(9).	CM000082
00042	00218	02 G-PEQ PICTURE XXX.	CM000082
00043	00219	02 G-RCAL PICTURE X(6).	CM000082
00044	00301	FO C-FILE RECORDING F BLOCK 1 RECORDS RECORD 80	CM000082
00045	00302	LABEL RECORDS STANDARD DATA RECORD CFIL.	CM000082
00046	00303	01 CFIL.	CM000082
00047	00304	02 C-ND PICTURE X(4).	CM000082
00048		02 CCELL REDEFINES C-ND.	
00049		03 C1 PICTURE X.	
00050		03 C2 PICTURE XXX.	
00051	00305	02 C-CNT PICTURE 9.	CM000082
00052	00306	02 C-TYPEC PICTURE X(7).	CM000082
00053	00307	02 C-RANGE PICTURE X(7).	CM000082
00054	00308	02 C-RUNIT PICTURE XXX.	CM000082

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00055	00309	02	C-RCODE	PICTURE	X.		CM000082
00056	00310	02	C-PARM	PICTURE	X(9).		CM000082
00057	00311	02	C-MFG	PICTURE	X(9).		CM000082
00058	00312	02	C-AROND	PICTURE	X(6).		CM000082
00059	00313	02	C-AROCO	PICTURE	X.		CM000082
00060	00314	02	C-UOC	PICTURE	XXXX.		CM000082
00061	00315	02	C-RN	PICTURE	X.		CM000082
00062	00316	02	C-POS	PICTURE	X(9).		CM000082
00063	00317	02	C-NFG	PICTURE	X(9).		CM000082
00064	00318	02	C-PEQ	PICTURE	XXX.		CM000082
00065	00319	02	C-RCAL	PICTURE	X(6).		CM000082
00066	00401	FD	NEW-ONE	RECORDING F BLOCK 1 RECORDS	RECORD 80		CM000082
00067	00402			LABEL RECORDS STANDARD	DATA RECORD NUL.		CM000082
00068	00403	01	NUL.				CM000082
00069	00404	02	FILLER	PICTURE	X(80).		CM000082
00070	00404	FD	LISTING	RECORDING F BLOCK 12 RECORDS	RECORD 132		CM000082
00071	00404			LABEL RECORDS OMITTED	DATA RECORD LIST.		CM000082
00072	00404	01	LIST.				CM000082
00073	00404	02	FILLER	PICTURE	X(132).		CM000082
00074	00405	FD	OPCARO	RECORDING F BLOCK 1 RECORDS	RECORD 80		CM000082
00075	00405			LABEL RECORDS STANDARD	DATA RECORD OCARO.		CM000082
00076	00405	01	OCARO.				CM000082
00077	00405	02	OPT	PICTURE	X.		CM000082
00078	00405	02	FILLER	PICTURE	XX.		CM000082
00079	00405	02	OATE.				CM000082
00080	00405	03	MO	PICTURE	99.		CM000082
00081	00405	03	OY	PICTURE	99.		CM000082
00082	00405	03	YR	PICTURE	99.		CM000082
00083	00405	02	FILLER	PICTURE	X(70).		CM000082
00084	00406	02	COMM	PICTURE	X.		CM000082
00085	00406	88	COM	VALUE	'C'.		CM000082
00086	**00406		WORKING-STORAGE SECTION.				CM000082
00087	00406	77	JECT	PICTURE	99	VALUE 60.	
00088		77	JCAR	PICTURE	X(6).		
00089	00407	01	LLINE.				CM000082
00090	00407	02	SK	PICTURE	X	VALUE '1'.	CM000082
00091	00407	02	FILLER	PICTURE	XXXX	VALUE SPACE.	CM000082
00092		02	L-CELL	PICTURE	X.		
00093	00407	02	FILLER	PICTURE	XXXX	VALUE SPACE.	CM000082
00094	00407	02	L-TYPCO	PICTURE	X(7).		CM000082
00095	00407	02	FILLER	PICTURE	XXXX	VALUE SPACE.	CM000082
00096	00407	02	L-RANGE	PICTURE	X(7).		CM000082
00097	00407	02	FILLER	PICTURE	XXX	VALUE SPACE.	CM000082
00098	00408	02	L-UNIT	PICTURE	XXX.		CM000082
00099	00408	02	FILLER	PICTURE	XXX	VALUE SPACE.	CM000082
00100	00408	02	L-COOE	PICTURE	X.		CM000082
00101	00408	02	FILLER	PICTURE	XXX	VALUE SPACE.	CM000082
00102	00408	02	L-PARM	PICTURE	X(9).		CM000082
00103	00408	02	FILLER	PICTURE	XXX	VALUE SPACE.	CM000082
00104	00408	02	L-MFG	PICTURE	X(9).		CM000082
00105	00408	02	FILLER	PICTURE	XXX	VALUE SPACE.	CM000082
00106	00408	02	L-AROND	PICTURE	X(6).		CM000082
00107	00408	02	FILLER	PICTURE	XXX	VALUE SPACE.	CM000082
00108	00409	02	L-AROCO	PICTURE	X.		CM000082
00109	00409	02	FILLER	PICTURE	XXX	VALUE SPACE.	CM000082
00110	00409	02	L-UDC	PICTURE	XXXX.		CM000082
00111	00409	02	FILLER	PICTURE	XXXX	VALUE SPACE.	CM000082

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00112	004094	02	L-RN	PICTURE X.	CM000082
00113	004095	02	FILLER	PICTURE XXXX VALUE SPACE.	CM000082
00114	004096	02	L-POS	PICTURE X(9).	CM000082
00115	004097	02	FILLER	PICTURE XXX VALUE SPACE.	CM000082
00116	004098	02	L-NEG	PICTURE X(9).	CM000082
00117	004099	02	FILLER	PICTURE XXX VALUE SPACE.	CM000082
00118	004100	02	L-PEQ	PICTURE XXX.	CM000082
00119	004101	02	FILLER	PICTURE XXX VALUE SPACE.	CM000082
00120	004102	02	L-RCAL	PICTURE X(6).	CM000082
00121	004103	02	FILLER	PICTURE X(6) VALUE SPACE.	CM000082
00122	004200	01	F-PAGE.		CM000082
00123	00421	02	FILLER	PICTURE X(50) VALUE SPACE.	CM000082
00124	00422	02	FILLER	PICTURE X(19) VALUE 'RTF TRANSDUCER FILE'.	CM000082
00125	00423	02	FILLER	PICTURE X(63) VALUE SPACE.	CM000082
00126	00425	01	HEAD.		CM000082
00127	00426	02	FILLER	PICTURE X(20) VALUE ' CELL TYPE CD '.	CM000082
00128	00427	02	FILLER	PICTURE X(20) VALUE 'RANGE UNIT CODE '.	CM000082
00129	00428	02	FILLER	PICTURE X(20) VALUE 'PARAMETER MFGR '.	CM000082
00130	00429	02	FILLER	PICTURE X(20) VALUE 'ARD I-NO CODE UDC'.	CM000082
00131	00430	02	FILLER	PICTURE X(20) VALUE ' RN POS RN '.	CM000082
00132	00431	02	FILLER	PICTURE X(20) VALUE ' NEG RN UNITS '.	CM000082
00133	00432	02	FILLER	PICTURE X(12) VALUE 'R DATE '.	CM000082
00134	00501		PROCEDURE DIVISION.		CM000082
00135	005011		NOTE1.		CM000082
00136	005012		NOTE IF A LISTING OF UPDATED FILE IS DESIRED, PUNCH		CM000082
00137	005013		AN 'O' IN COLUMN 1 OF OPTION CARD, ELSE LEAVE		CM000082
00138	005014		COLUMN 1 BLANK.		CM000082
00139	005015		BGIN.		CM000082
00140	00502		OPEN INPUT GILMORE C-FILE.		CM000082
00141	00503		OPEN OUTPUT NEW-ONE.		CM000082
00142	005031		OPEN OUTPUT LISTING.		CM000082
00143	005032		OPEN INPUT OPCARD.		CM000082
00144	005033		READ OPCARD AT END GO TO CARD-ERR.		CM000082
00145	005034		IF COM NEXT SENTENCE ELSE GO TO CARD-ERR.		CM000082
00146	00504		READGIL.		CM000082
00147	00505		READ GILMORE AT END GO TO G-END.		CM000082
00148	00506		READ-C.		CM000082
00149	00507		READ C-FILE AT END GO TO C-END.		CM000082
00150			MOVE C-ARND TO JCAR.		CM000082
00151	00508		CMRPR.		CM000082
00152	00509		IF C-ARND < G-ARND		CM000082
00153	00510		WRITE NU1 FROM CFIL		CM000082
00154	005101		IF OPT = 'O' PERFORM MOV-CF GO TO READ-C ELSE		CM000082
00155	00511		GO TO READ-C.		CM000082
00156			IF C-ARND = G-ARND		CM000082
00157			IF C-ARND < G-ARND		CM000082
00158			WRITE NU1 FROM CFIL		CM000082
00159			IF OPT = 'O' PERFORM MOV-CF GO TO READ-C		CM000082
00160			ELSE GO TO READ-C.		CM000082
00161	00512		IF C-ARND = G-ARND		CM000082
00162			IF C-ARND = G-ARND		CM000082
00163	00513		WRITE NU1 FROM GILM		CM000082
00164	005131		IF OPT = 'O' PERFORM MOV-GIL GO TO READGIL ELSE		CM000082
00165	00514		GO TO READGIL.		CM000082
00166	00515		WRITE NU1 FROM GILM.		CM000082
00167	005151		IF OPT = 'O' PERFORM MOV-GIL.		CM000082
00168	00516		READ GILMORE AT END GO TO G-END.		CM000082

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00169 00517 GO TO COMPR. CM000082
00170 00518 C-ENO. CM000082
00171 00519 WRITE NUI FROM GILM. CM000082
00172 005191 IF OPT = '0' PERFORM MOV-GIL. CM000082
00173 00520 READ GILMORE AT END GO TO ALL. CM000082
00174 00521 GO TO C-ENO. CM000082
00175 00522 G-ENO. CM000082
00176 IF JCAR = G-ARONO GO TO GEE.
00177 00524 G1. WRITE NUI FROM CFIL. CM000082
00178 005240 GEE.
00179 005241 IF OPT = '0' PERFORM MOV-CF. CM000082
00180 00525 READ C-FILE AT END GO TO ALL. CM000082
00181 00601 GO TO G1. CM000082
00182 006011 CARD-ERR. CM000082
00183 **006011 DISPLAY 'OPTION CARD IOIOT-EO'. CM000082
00184 00602 ALL. CM000082
00185 00603 CLOSE C-FILE GILMORE NEW-ONE. CM000082
00186 006031 CLOSE LISTING OPCARD. CM000082
00187 00604 STOP RUN. CM000082
00188 007000 MOV-GIL. CM000082
00189 MOVE G-TYPCO TO L-TYPCO.
00190 MOVE GA TO L-CELL.
00191 00704 MOVE G-RANGE TO L-RANGE CM000082
00192 00705 MOVE G-RUNIT TO L-UNIT CM000082
00193 00706 MOVE G-RCODE TO L-CODE CM000082
00194 00707 MOVE G-PARM TO L-PARM CM000082
00195 00708 MOVE G-MFG TO L-MFG CM000082
00196 00709 MOVE G-ARONO TO L-ARONO CM000082
00197 00710 MOVE G-AROCO TO L-AROCO CM000082
00198 00711 MOVE G-UDC TO L-UDC CM000082
00199 00712 MOVE G-RN TO L-RN CM000082
00200 00713 MOVE G-POS TO L-POS CM000082
00201 00714 MOVE G-NEG TO L-NEG CM000082
00202 00715 MOVE G-PEQ TO L-PEQ CM000082
00203 00716 MOVE G-RCAL TO L-RCAL CM000082
00204 00717 ADD 1 TO JECT. CM000082
00205 00718 PERFORM CJECT CM000082
00206 00719 WRITE LIST FROM LLINE AFTER SK. MOVE ' ' TO SK. CM000082
00207 00720 CJECT. CM000082
00208 00721 IF JECT > 52 CM000082
00209 MOVE '0' TO SK
00210 00723 WRITE LIST FROM HEAD AFTER 0 CM000082
00211 00724 MOVE C TO JECT. CM000082
00212 008000 MOV-CF. CM000082
00213 MOVE C1 TO L-CELL.
00214 00803 MOVE C-TYPCD TO L-TYPCD. CM000082
00215 00804 MOVE C-RANGE TO L-RANGE. CM000082
00216 00805 MOVE C-RUNIT TO L-UNIT CM000082
00217 00806 MOVE C-RCODE TO L-CODE CM000082
00218 00807 MOVE C-PARM TO L-PARM CM000082
00219 00808 MOVE C-MFG TO L-MFG. CM000082
00220 00809 MOVE C-ARONO TO L-ARONO CM000082
00221 00810 MOVE C-AROCO TO L-AROCO CM000082
00222 00811 MOVE C-UDC TO L-UDC CM000082
00223 00812 MOVE C-RN TO L-RN CM000082
00224 00813 MOVE C-POS TO L-POS CM000082
00225 00814 MOVE C-NEG TO L-NEG CM000082

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00226	00815	MOVE C-PEQ TO L-PEQ	CM000082
00227	00816	MOVE C-RCAL TO L-RCAL	CM000082
00228	00817	ADD 1 TO JECT.	CM000082
00229	00818	PERFORM CJECT.	CM000082
00230	00819	WRITE LIST FROM LLINE AFTER SK.	CM000082
00231	00820	MOVE ' ' TO SK.	CM000082

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00001 001010 IDENTIFICATION DIVISION. CM000057
00002 001020 PROGRAM-IO. 'CM000057'. CM000057
00003 001030 AUTHOR. JACK ROSE. CM000057
00004 001040 INSTALLATION. ARD INC. CM000057
00005 001050 DATE-WRITTEN. DEC 1967. CM000057
00006 001060 DATE-COMPILED. JAN 6, 1970 CM000057
00007 001070 SECURITY. CM000057
00008 001080 REMARKS. PROGRAM UPDATES RTF TRANSDUCER FILE. CM000057
00009 001090 ENVIRONMENT DIVISION. CM000057
00010 001100 CONFIGURATION SECTION. CM000057
00011 001110 SOURCE-COMPUTER. IBM-360 H50. CM000057
00012 001120 OBJECT-COMPUTER. IBM-360 H50. CM000057
00013 001130 INPUT-OUTPUT SECTION. CM000057
00014 001140 FILE-CONTROL. CM000057
00015 001150 SELECT C-FILE ASSIGN 'CF001' UTILITY. CM000057
00016 001160 SELECT C-IN ASSIGN 'CN001' UTILITY. CM000057
00017 001170 SELECT KARDS ASSIGN 'C0001' UTILITY. CM000057
00018 001180 SELECT NU-FILE ASSIGN 'NF001' UTILITY. CM000057
00019 001190 SELECT OUTFILE ASSIGN 'OT001' UTILITY. CM000057
00020 001200 SELECT LISTING ASSIGN 'LT001' UTILITY. CM000057
00021 001220 DATA DIVISION. CM000057
00022 001230 FILE SECTION. CM000057
00023 002010 FD C-FILE RECORDING F BLOCK 1 RECORDS RECORD 80 CM000057
00024 002020 LABEL RECORDS OMITTED DATA RECORD C-FIL. CM000057
00025 002030 01 C-FIL. CM000057
00026 002031 02 CF-TC PICTURE X. CM000057
00027 002040 02 CF-ND PICTURE XXX. CM000057
00028 002050 02 CF-CNT PICTURE 9. CM000057
00029 002060 02 CF-TYPCD PICTURE X(7). CM000057
00030 002070 02 CF-RNG PICTURE X(7). CM000057
00031 002080 02 CF-RNGU PICTURE XXX. CM000057
00032 002090 02 CF-RNGCD PICTURE X. CM000057
00033 002100 02 CF-PARM PICTURE X(9). CM000057
00034 002110 02 CF-MFG PICTURE X(9). CM000057
00035 ** 09 02 CF-INC0. CM000057
00036 10 03 CF-IND PICTURE X(6). CM000057
00037 11 03 CF-INOC0 PICTURE X. CM000057
00038 002140 02 CF-UOC PICTURE X(4). CM000057
00039 002150 02 CF-RN PICTURE X. CM000057
00040 002160 02 CF-POS PICTURE X(9). CM000057
00041 002170 02 CF-NEG PICTURE X(9). CM000057
00042 002180 02 CF-EQU PICTURE XXX. CM000057
00043 ** 20 02 CF-RCAL. CM000057
00044 21 03 CFQMD PICTURE XX. CM000057
00045 22 03 CFROY PICTURE XX. CM000057
00046 23 03 CFRYR PICTURE XX. CM000057
00047 003010 FD KARDS RECORDING F BLOCK 10 RECORDS RECORD 80 CM0
00048 003020 LABEL RECORDS STANDARD DATA RECORDS N-CD C-CD O-CD. CM000057
00049 003030 01 N-CD. CM000057
00050 003040 02 N-TC PICTURE X. CM000057
00051 003041 02 N-NO PICTURE XXX. CM000057
00052 003050 02 N-CNT PICTURE 9. CM000057
00053 003060 02 N-TYPC0 PICTURE X(7). CM000057
00054 003070 02 N-RNG PICTURE X(7). CM000057

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00055	003080	02	N-RNGU	PICTURE XXX.	CM000057
00056	003090	02	N-RNGCO	PICTURE X.	CM000057
00057	003100	02	N-PARM	PICTURE X(9).	CM000057
00058	003110	02	N-MFG	PICTURE X(9).	CM000057
00059	003120	02	N-INO	PICTURE X(6).	CM000057
00060	003130	02	N-INOCO	PICTURE X.	CM000057
00061	003140	02	N-UDC	PICTURE XXXX.	CM000057
00062	003150	02	N-RN	PICTURE X.	CM000057
00063	003160	02	N-POS	PICTURE X(9).	CM000057
00064	003170	02	N-NEG	PICTURE X(9).	CM000057
00065	003180	02	N-EQU	PICTURE XXX.	CM000057
00066	003190	02	N-RCAL	PICTURE X(6).	CM000057
00067	004010	01	C-CO.		CM000057
00068	004020	02	C-PARM	PICTURE X(9).	CM000057
00069	004030	02	RC-PARM	REDEFINES C-PARM.	CM000057
00070	004040	03	RC-P1	PICTURE X(6).	CM000057
00071	004050	03	FILLER	PICTURE X.	CM000057
00072	004060	03	RC-P2	PICTURE X.	CM000057
00073	004070	03	FILLER	PICTURE X.	CM000057
00074	004080	02	C-INO	PICTURE X(6).	CM000057
00075	004090	02	C-INOCO	PICTURE X.	CM000057
00076	004100	02	C-UOC	PICTURE XXXX.	CM000057
00077	004110	02	C-RN	PICTURE X.	CM000057
00078	004120	02	C-POS	PICTURE X(9).	CM000057
00079	004130	02	C-NEG	PICTURE X(9).	CM000057
00080	004140	02	C-RCAL	PICTURE X(6).	CM000057
00081	004150	02	C-TC	PICTURE X.	CM000057
00082	004160	02	FILLER	PICTURE X(34).	CM000057
00083	005010	01	O-CD.		CM000057
00084	005020	02	O-OPT	PICTURE X.	CM000057
00085	005030	88	O8-OPT	VALUE 'O'.	CM000057
00086	005040	02	O-PP	PICTURE XX.	CM000057
00087	005050	02	O-OATE.		CM000057
00088	005060	03	O-MO	PICTURE 99.	CM000057
00089	005070	03	O-OY	PICTURE 99.	CM000057
00090	005080	03	O-YR	PICTURE 99.	CM000057
00091	005090	02	FILLER	PICTURE X(70).	CM000057
00092	005100	02	O-C	PICTURE X.	CM000057
00093	005110	88	O8-C	VALUE 'C'.	CM000057
00094	005130	F0	OUTFILE	RECORDING F BLOCK 1 RECORDS RECORD 80	CM000057
00095	005140			LABEL RECORDS STANDARD DATA RECORD OUTFIL.	CM000057
00096	005150	01	OUTFIL.		CM000057
00097	005160	02	FILLER	PICTURE X(80).	CM000057
00098	006010	F0	C-IN	RECORDING F BLOCK 1 RECORDS RECORD 80	CM000057
00099	006020			LABEL RECORDS STANDARD DATA RECORD CTIN.	CM000057
00100	006030	01	CTIN.		CM000057
00101		02	CTIN52	PICTURE X(52).	
00102		02	CTINRN	PICTURE X.	
00103		02	CTIN80	PICTURE X(27).	
00104	006060	F0	LISTING	RECORDING F BLOCK 12 RECORDS RECORD 132	
00105	006070			LABEL RECORDS OMITTED DATA RECORD LIST.	CM000057
00106	006080	01	LIST	PICTURE X(132).	CM000057
00107	006090	F0	NU-FILE	RECORDING F BLOCK 25 RECORDS RECORD 80	
00108	006100			LABEL RECORDS STANDARD DATA RECORD NU-FIL.	
00109	006110	01	NU-FIL.		
00110	006120	02	FILLER	PICTURE X(80).	
00111	007C10		WORKING-STORAGE SECTION.		CM000057

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00112	007020	77	SW	PICTURE 9	VALUE 0.	CM000057
00113	007030	77	KBXS	PICTURE 9	VALUE 0.	CM000057
00114	007040	77	CSW	PICTURE 9	VALUE 0.	CM000057
00115	007050	77	SUB	PICTURE 99	VALUE 0.	CM000057
00116	007060	77	SUR1	PICTURE 99	VALUE 0.	CM000057
00117	007070	77	SKP	PICTURE X	VALUE '0'.	
00118	007080	77	EJCT	PICTURE 99	VALUE 59.	CM000057
00119	007090	77	DSKP	PICTURE X	VALUE '0'.	
00120	007100	77	SW2	PICTURE 9	VALUE 0.	
00121		77	CQSW	PICTURE 9	VALUE 0.	
00122	007110	77	J	PICTURE 99	VALUE 0.	
00123	007120	77	CBS	PICTURE X	VALUE SPACE.	
00124	**007020	77	CDC	PICTURE X(6)	VALUE SPACE.	
00125	**	01	01	CT-HOLO1.		
00126		02	02	CTH1	PICTURE X(41).	
00127		03	02	CTHND	PICTURE X(7).	
00128		04	02	CTH18	PICTURE X(26).	
00129		05	02	CTHMD	PICTURE XX.	
00130		06	02	CTHOY	PICTURE XX.	
00131		07	02	CTHYR	PICTURE XX.	
00132		12	01	CT-HOLO2.		
00133		13	02	CTH2	PICTURE X(80).	
00134		14	01	CT-HOLO3.		
00135		15	02	CTH3	PICTURE X(80).	
00136		16	01	CT-HOLO4.		
00137		17	02	CTH4	PICTURE X(80).	
00138		18	01	CT-HOLO5.		
00139		19	02	CTH5	PICTURE X(80).	
00140	007130	01		HOLO-TESTCELL.		CM000057
00141	007140	02	HRC-PC	PICTURE X	OCCURS 10.	CM000057
00142	008081	01		DATALN.		CM000057
00143	008082	02	FILLER	PICTURE X(4)	VALUE SPACE.	CM000057
00144	008090	02	LTC	PICTURE X.		CM000057
00145	008100	02	FILLER	PICTURE X(4)	VALUE SPACE.	CM000057
00146	008110	02	LTPCD	PICTURE X(7).		CM000057
00147	008120	02	FILLER	PICTURE X(4)	VALUE SPACE.	CM000057
00148	008130	02	LRNG	PICTURE X(7).		CM000057
00149	008140	02	FILLER	PICTURE X(3)	VALUE SPACE.	CM000057
00150	008150	02	LRNGU	PICTURE XXX.		CM000057
00151	008160	02	FILLER	PICTURE XXX	VALUE SPACE.	CM000057
00152	008170	02	LRNGCO	PICTURE X.		CM000057
00153	008180	02	FILLER	PICTURE XXX	VALUE SPACE.	CM000057
00154	008190	02	LPRM	PICTURE X(9).		CM000057
00155	008200	02	FILLER	PICTURE XXX	VALUE SPACE.	CM000057
00156	008210	02	LMFG	PICTURE X(9).		CM000057
00157	008220	02	FILLER	PICTURE XXX	VALUE SPACE.	CM000057
00158	008230	02	LINO	PICTURE X(6).		CM000057
00159	008240	02	FILLER	PICTURE XXX	VALUE SPACE.	CM000057
00160	008250	02	LINOC	PICTURE X.		CM000057
00161	009010	02	FILLER	PICTURE XXX	VALUE SPACE.	CM000057
00162	009020	02	LUOC	PICTURE XXXX.		CM000057
00163	009030	02	FILLER	PICTURE XXXX	VALUE SPACE.	CM000057
00164	009040	02	LRN	PICTURE X.		CM000057
00165	009050	02	FILLER	PICTURE XXXX	VALUE SPACE.	CM000057
00166	009060	02	LPOS	PICTURE X(9).		CM000057
00167	009070	02	FILLER	PICTURE XXX	VALUE SPACE.	CM000057
00168	009080	02	LNFG	PICTURE X(9).		CM000057

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00169 009090 02 FILLER PICTURE XXX VALUE SPACE. CM000057
00170 009100 02 LEQU PICTURE XXX. CM000057
00171 009110 02 FILLER PICTURE XXX VALUE SPACE. CM000057
00172 009120 02 LRCAL PICTURE X(6). CM000057
00173 009130 02 FILLER PICTURE X(6) VALUE SPACE. CM000057
00174 009180 01 F-PAGE. CM000057
00175 02 FILLER PICTURE X(10) VALUE SPACE.
00176 02 FILLER PICTURE X(108) VALUE 'RTF, J-INSTRUMENT BRANCH,
00177 - 'MASTER TRANSDUCER INVENTORY AND ASSIGNMENT LISTING (C-FILE)
00178 - ' RUN DATE '.
00179 02 PRMO PICTURE 99.
00180 02 FILLFR PICTURE X VALUE '-'.
00181 02 PROY PICTURE 99.
00182 02 FILLER PICTURE X VALUE '-'.
00183 02 PRYR PICTURE 99.
00184 02 FILLFR PICTURE X(6) VALUE SPACE.
00185 01 F-PAGES.
00186 02 FILLER PICTURE X(10) VALUE SPACE.
00187 02 FILLER PICTURE X(32) VALUE 'TRANSDUCERS BY INSTRUMENT NU
00188 - 'MBER'.
00189 02 FILLER PICTURE X(90) VALUE SPACE.
00190 010010 01 HEADFR. CM000057
00191 010020 02 FILLER PICTURE X(99) VALUE ' CELL TYPE CO RANGE CM000057
00192 010030- ' UNIT CODE PARAMETER MFGR ARO I-NO CODE UDC RNCM000057
00193 010040- ' POS RN '. CM000057
00194 010050 02 FILLER PICTURE X(33) VALUE ' NEG RN UNITS R DATE CM000057
00195 010060- ' '. CM000057
00196 012010 PROCEDURE DIVISION. CM000057
00197 020000 NOTE1. CM000057
00198 020010 NOTE CARDS USED TO ADD OR REPLACE AN ENTIRELY NEW RECORD CM000057
00199 020020 MUST BE PRECEDED WITH A HEADER CARD WHICH HAS 'HEAD-N' CM000057
00200 020030 PUNCHED IN COLUMNS 75 - 80 THESE CARDS MUST BE SORTED CM000057
00201 020040 TO ARO-I-NO COLUMNS 42 - 47 ASCENDING SEQUENCE ALSO CM000057
00202 020050 THESE MUST BE FIRST UPDATE CARDS SUPPLIED. CM000057
00203 020060 NOTE2. CM000057
00204 020070 NOTE THE NEXT TYPE OF UPDATE CARD IS USED TO MODIFY CM000057
00205 020080 OR DELETE AN EXISTING RECORD THESE CARDS MUST BE CM000057
00206 020090 PRECEDED BY A HEADER CARD WHICH HAS 'HEAD-C' PUNCHED CM000057
00207 020100 IN COLUMNS 75 - 80 CARDS MUST BE SORTED TO ARO-NO
00208 020110 COLUMNS 10 - 15 ASCENDING SEQUENCE. CM000057
00209 **012024 FIRST.
00210 **012020 OPEN INPUT C-IN. CM000057
00211 012030 OPEN OUTPUT C-FILF. CM000057
00212 ** 01 A0. READ C-IN AT END GO TO A1.
00213 02 A2. MOVE CTIN TO CT-HOL01.
00214 MOVE CTIN TO C-FIL.
00215 03 READ C-IN AT END GO TO A1.
00216 04 MOVE CTIN TO CT-HOL02.
00217 05 READ C-IN AT END GO TO A1.
00218 06 MOVE CTIN TO CT-HOL03.
00219 07 READ C-IN AT END GO TO A1.
00220 08 MOVE CTIN TO CT-HOL04.
00221 09 READ C-IN AT END GO TO A1.
00222 IF CTINRY NOT = '4' GO TO A0-ERR.
00223 11 MOVE CTIN TO CT-HOL05.
00224 13 A3.
00225 14 READ C-IN AT END GO TO A1.

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00226      MOVE CTIN TO C-FIL.
00227      15      IF CF-RN NDT = '0' GO TO AO-ERR.
00228      16      IF CF-INCD = CTHNO GO TO ACT1.
00229      18      WRITE C-FIL FROM CT-HOLD1.
00230      19      WRITE C-FIL FROM CT-HOLD2.
00231      20      WRITE C-FIL FROM CT-HOLD3.
00232      21      WRITE C-FIL FROM CT-HOLD4.
00233      22      WRITE C-FIL FROM CT-HOLD5.
00234      23      GO TO A2.
00235 **    D1 ACT1.
00236      02      IF CFRYR > CTHYR GO TO A2.
00237      03      IF CFRYR < CTHYR GO TO ACT2.
00238      04      IF CFRMO > CTHMO GO TO A2.
00239      05      IF CFRMO < CTHMO GO TO ACT2.
00240      06      IF CFROY > CTHDY GO TO A2.
00241      07      IF CFROY < CTHDY GO TO ACT2.
00242      08      GO TO A2.
00243      09 ACT2.
00244      10      READ C-IN AT END GO TO A1.
00245      11      READ C-IN AT END GO TO A1.
00246      12      READ C-IN AT END GO TO A1.
00247      13      READ C-IN AT END GO TO A1.
00248      14      GO TO A3.
00249      15 AO-ERR.  DISPLAY 'BAD FILE' CF-INCO.
00250      16      READ C-IN AT END GO TO A1.
00251      MOVE CTIN TO C-FIL.
00252      17      IF CF-RN NOT = '0' GO TO AO-ERR.
00253      18      GO TO A2.
00254      D12080 A1.
00255 **    20      WRITE C-FIL FROM CT-HOLD1.
00256      21      WRITE C-FIL FROM CT-HOLD2.
00257      22      WRITE C-FIL FROM CT-HOLD3.
00258      23      WRITE C-FIL FROM CT-HOLD4.
00259      24      WRITE C-FIL FROM CT-HOLD5.
00260      012090  CLOSE C-IN C-FILE.
00261      012100  OPEN INPUT KARDS.
00262      012110  READ KARDS AT END GO TO NO-DP.
00263      012120  IF O-DPT NDT = '0' GO TO NO-DP.
00264      MOVE O-MD TO PRMD.
00265      MOVE O-DY TO PRDY.
00266      MOVE O-YR TO PRYR.
00267      012130  READ KARDS AT END GO TO END-JOB.
00268      012140  IF N-RCAL = 'HEAD-N' GO TO PAR-B.
00269      012150  IF N-RCAL = 'HEAD-C' GO TO PAR-A.
00270      012160  DISPLAY 'NO HEADER CARD ' STOP RUN.
00271      012170 NO-DP.
00272      012180  DISPLAY 'NO OPTION CARD ' STOP RUN.
00273      012190 PAR-B.
00274      012200  READ KARDS AT END GO TO PAR-ZZ.
00275      IF N-RCAL = 'HEAD-C' GO TO PAR-A.
00276      012210  OPEN I-O C-FILE.  OPEN OUTPUT NU-FILE.
00277      012220 PAR-B1.
00278      012230  READ C-FILE AT END GO TO C8X.
00279      013010 PAR-B2.
00280      013020  IF CF-INO < N-INO  WRITE NU-FIL FROM C-FIL
00281      013030  GO TO PAR-B1.
00282      013040  IF CF-INO > N-INO  GO TO B2XXX.
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CM000057

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CMDD0057

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00283 013050 IF CF-INOC > N-INOC GO TO B2XXX.
00284 013060 IF CF-INOC < N-INOC
00285 013070 MOVE CF-INO TO COC
00286 013080 PERFORM WRN THRU WRNX 5 TIMES
00287 013090 GO TO PAR-B2.
00288 013100 1.
00289 013110 IF CF-RN < N-RN GO TO 2.
00290 013120 IF CF-RN > N-RN DISPLAY '1312' CF-INO GO TO PAR-B1.
00291 013130 MOVE CF-INO TO CDC.
00292 013140 MOVE CF-INOC TO CBS.
00293 013140 WRITE NU-FIL FROM N-CO. READ KAROS AT END GO TO PAR-ZZ.
00294 013141 IF N-RCAL NOT = 'HEAD-C' GO TO 6.
00295 013142 8. IF CF-RN = '4' MOVE 1 TO KBXS GO TO KBX.
00296 013143 READ C-FILE AT END GO TO CBX2.
00297 013144 WRITE NU-FIL FROM C-FIL.
00298 013145 GO TO 8.
00299 6. IF COC = N-INO IF CBS = N-INOC GO TO 3.
00300 013160 5. IF CF-RN = '4' GO TO PAR-B1.
00301 013170 READ C-FILE AT END GO TO CBX.
00302 013180 WRITE NU-FIL FROM C-FIL.
00303 013190 GO TO 5.
00304 013200 2.
00305 013210 MOVE CF-INO TO COC
00306 013220 WRITE NU-FIL FROM C-FIL.
00307 013230 3.
00308 013240 READ C-FILE AT END GO TO CBX.
00309 013250 IF CF-INO = CDC GO TO PAR-B2.
00310 014010 DISPLAY '1401' GO TO PAR-B1.
00311 014020 WRN.
00312 014030 IF CDC NOT = CF-INO GO TO WRNX.
00313 014040 WRITE NU-FIL FROM C-FIL.
00314 014050 READ C-FILE AT END GO TO CBX.
00315 014060 WRNX.
00316 014070 EXIT.
00317 014080 B2XXX.
00318 014090 MOVE N-INOC TO CBS.
00319 014090 MOVE N-INO TO COC.
00320 014100 MOVE 0 TO J.
00321 014110 WNU.
00322 014120 WRITE NU-FIL FROM N-CO.
00323 014130 ADD 1 J GIVING J.
00324 014140 IF CDC NOT = N-INO DISPLAY '1414' GO TO PAR-B2.
00325 014150 7.
00326 014160 READ KAROS AT END GO TO PAR-ZZ.
00327 014170 IF N-RCAL = 'HEAD-C' GO TO 89.
00328 014180 IF J NOT = 5 GO TO WNU.
00329 014190 IF CDC = N-INO IF CBS = N-INOC DISPLAY '1419' COC CBS
00330 014191 GO TO 7.
00331 014200 GO TO PAR-B2.
00332 89. WRITE NU-FIL FROM C-FIL. GO TO 8.
00333 **013130 CBX. CM000057
00334 013160 WRITE NU-FIL FROM N-CO. CM000057
00335 **013140 READ KAROS AT END GO TO CBX1. CM000057
00336 013150 IF N-RCAL = 'HEAD-C' GO TO CBX2. CM000057
00337 013170 GO TO CBX. CM000057
00338 013180 CBX2. CM000057
00339 013190 CLOSE C-FILE NU-FILE. CM000057

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00340	013200	OPEN INPUT NU-FILE.	CM000057
00341	013210	OPEN OUTPUT C-FILE.	CM000057
00342	013220 CBX3.		CM000057
00343	013230	READ NU-FILE AT END GO TO CBX22.	CM000057
00344	013240	WRITE C-FIL FROM NU-FIL.	CM000057
00345	013250	GO TO CBX3.	CM000057
00346	014010 CBX22.		CM000057
00347	014020	CLOSE C-FILE NU-FILE.	CM000057
00348	014030	GO TO PAR-A.	CM000057
00349	014040 CBX1.		CM000057
00350	014050	GO TO END-JOB.	CM000057
00351	014070 KBX.		CM000057
00352	014080	READ C-FILE AT END GO TO KBX1.	CM000057
00353	014090	WRITE NU-FIL FROM C-FIL.	
00354	014100	GO TO KBX.	CM000057
00355	014110 KBX1.		CM000057
00356	014120	IF KBXS = 1 GO TO CBX2.	CM000057
00357	014130	GO TO CBX1.	CM000057
00358	014140 PAR-A.		CM000057
00359	014150	OPEN I-O C-FILE. OPEN OUTPUT NU-FILE.	CM000057
00360	014160 PAR-C.		CM000057
00361	014170	READ KARDS AT END GO TO END-JOB.	CM000057
00362	014180 PAXY.	IF C-PARM = 'ZERO CALS' GO TO E1.	CM000057
00363	014190	IF RC-P1 = 'DELETE' GO TO E2.	CM000057
00364	014200	IF C-PARM = 'UNASSIGN' GO TO E3.	
00365	014210 PAR-D.		
00366	014211	IF SW2 = 1 MOVE D TO SW2 GO TO PAR-D1.	
00367	014212	READ C-FILE AT END DISPLAY 'D14212' GO TO END-JOB1.	
00368	014713 PAR-D1.		
00369		IF C-INO > CF-INO GO TO SHEWL.	
00370		IF C-INOC > CF-INOC GO TO SHEWL.	
00371		IF C-INO < CF-INO GO TO BADAS.	
00372		IF C-INOC < CF-INOC GO TO BADAS.	
00373	014230	IF C-RN NOT = CF-RN GO TO SHEWL.	CM000057
00374	014240	IF C-INOC NOT = SPACE MOVE C-INOC TO CF-INOC	CM000057
00375	014250	MOVE 1 TO CSW.	CM000057
00376	015010	IF C-UDC NOT = SPACE MOVE 1 TO CSW	CM000057
00377	015020	MOVE C-UDC TO CF-UDC.	CM000057
00378	015030	IF C-RN NOT = SPACE MOVE 1 TO CSW	CM000057
00379	015040	MOVE C-RN TO CF-RN.	CM000057
00380	015050	IF C-PDS NOT = SPACE MOVE 1 TO CSW	CM000057
00381	015060	MOVE C-PDS TO CF-PDS.	CM000057
00382	015070	IF C-NEG NOT = SPACE MOVE 1 TO CSW	CM000057
00383	015080	MOVE C-NEG TO CF-NEG.	CM000057
00384	015090	IF C-RCAL NOT = SPACE MOVE 1 TO CSW	CM000057
00385	015100	MOVE C-RCAL TO CF-RCAL.	CM000057
00386	015110	IF C-TC NOT = SPACE MOVE 1 TO CSW	CM000057
00387	015120	MOVE C-TC TO CF-TC.	CM000057
00388	015130	IF CSW = D MOVE SPACE TO CF-PARM CF-TC	CM000057
00389	015140	MOVE D TO CSW.	
00390	015141	MOVE C-PARM TO CF-PARM.	
00391	015150 PAR-DD.		CM000057
00392	015160	WRITE NU-FIL FROM C-FIL.	CM000057
00393	015170	GO TO PAR-C.	CM000057
00394		BADAS.	
00395		DISPLAY 'BAD INPUT CARD' C-CD.	
00396		MOVE 1 TO SW2.	

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00397      GO TO PAR-C.
00398 015180 SHEWL.
00399 015190      WRITE NU-FIL FROM C-FIL. GO TO PAR-C. CM000057
00400 015200 EI. CM000057
00401 015201      IF SW2 = 1 MOVE 0 TO SW2 GO TO E1B.
00402 015210      READ C-FILE AT END DISPLAY '015210' GO TO END-JOB1.
00403 015211 E1B.
00404 015212      IF C-INO = CF-INO
00405 015213      IF C-INOC0 = CF-INOC0
00406 015214      IF C-RN = SPACE
00407 015215      GO TO ZRO-ALL.
00408 015220      IF C-INO = CF-INO
00409 015230      IF CF-INOC0 = C-INOC0
00410 015231      IF CF-RN = C-RN
00411 015240      MOVE SPACE TO CF-UDC CF-PARM CF-POS CF-NEG CM000057
00412 015250      CF-RCAL CF-TC CM000057
00413 016010      WRITE NU-FIL FROM C-FIL CM000057
00414 016020      GO TO PAR-C. CM000057
00415 016030      WRITE NU-FIL FROM C-FIL. CM000057
00416 016040      GO TO E1. CM000057
00417 016041 ZRO-ALL.
00418 016042      MOVE SPACE TO CF-UDC CF-PARM CF-POS CF-NEG CF-RCAL CF-TC.
00419 016043      WRITE NU-FIL FROM C-FIL.
00420 016044      GO TO E1.
00421 016050 E2. CM000057
00422 016060      IF RC-P2 = SPACE IF SW2 = 1 MOVE 0 TO SW2
00423 016061      GO TO E2A1 ELSE GO TO E2A.
00424 016080 E2R. CM000057
00425 016090      ADD 1 TO SUB. CM000057
00426 016100      MOVE RC-P2 TO HRC-PC (SUB) CM000057
00427 016110      IF SUB > 10 DISPLAY 'AREA EXCEED0' GO TO END-JOB. CM000057
00428 016120      GO TO PAR-C. CM000057
00429 016150 E2A. CM000057
00430 016151      IF SW2 = 1 MOVE 0 TO SW2 GO TO E2A1.
00431 016160      READ C-FILE AT END DISPLAY '016160' GO TO END-JOB1.
00432 016161 E2A1.
00433 016170      IF C-INO = CF-INO
00434 016171      IF CF-INOC0 = C-INOC0
00435 016172      MOVE 'XXX' TO CF-NO
00436 016180      MOVE 1 TO SW
00437 016190      WRITE NU-FIL FROM C-FIL CM000057
00438 016200      GO TO E2A. CM000057
00439 016210      IF SW = 1 MOVE 0 TO SW MOVE 1 TO SW2 GO TO PAR-C.
00440 016220      WRITE NU-FIL FROM C-FIL. CM000057
00441 016230      GO TO E2A. CM000057
00442 017030 E3. CM000057
00443 017031      IF SW2 = 1 MOVE 0 TO SW2 GO TO E3A.
00444 017040      READ C-FILE AT END DISPLAY '017040' GO TO END-JOB1.
00445 017041 E3A.
00446 017050      IF C-INO NOT = CF-INO WRITE NU-FIL FROM C-FIL GO TO E3. CM000057
00447 **017050      IF CF-INOC0 NOT = C-INOC0 WRITE NU-FIL FROM C-FIL
00448 017052      GO TO E3.
00449 017060      MOVE SPACE TO CF-TC CF-PARM. CM000057
00450 017070      WRITE NU-FIL FROM C-FIL. CM000057
00451 017080      GO TO PAR-C. CM000057
00452 017090 END-JOB.
00453 017092      IF SW2 = 1 GO TO E3B1.

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00454	017093	EJ80.		
00455	017094		READ C-FILE AT END GO TO EJ82.	
00456	017095	EJ81.		
00457	017096		WRITE NU-FIL FROM C-FIL.	
00458	017097		GO TO EJ80.	
00459	017098	EJ82.		
00460	017099		CLOSE NU-FILE.	
00461	017100		OPEN I-O NU-FILE.	CM000057
00462	017101		OPEN OUTPUT OUTFILE	CM000057
00463	017102		OPEN OUTPUT LISTING.	CM000057
00464	017103		WRITE LIST FROM F-PAGE AFTER 0.	CM000057
00465	017104		WRITE LIST FROM F-PAGES AFTER 2.	
00466	017105		GO TO CK-JCT.	
00467	017106	EJ80.	READ NU-FILE INTO C-FIL AT END GO TO ALLJ.	CM000057
00468	017107		IF CF-ND = 'XXX' GO TO EJ82.	PERFORM CK-TC THRU CX. CM000057
00469	017108		MOVE CF-TC TO LTC.	CM000057
00470	017109		MOVE CF-TYPE TO LTYP.	CM000057
00471	017110		MOVE CF-RNG TO LRNG.	CM000057
00472	017111		MOVE CF-RNGU TO LRNGU.	
00473	017112		MOVE CF-RNGCO TO LRNGCO.	CM000057
00474	017113		MOVE CF-PARM TO LPARM.	CM000057
00475	017114		MOVE CF-MFG TO LMFG.	CM000057
00476	017115		MOVE CF-INO TO LINO.	CM000057
00477	017116		MOVE CF-INOCO TO LINOCO.	CM000057
00478	017117		MOVE CF-UDC TO LUOC.	CM000057
00479	017118		MOVE CF-RN TO LRN.	CM000057
00480	017119		MOVE CF-POS TO LPOS.	CM000057
00481	017120		MOVE CF-NEG TO LNEG.	CM000057
00482	017121		MOVE CF-FQU TO LEQU.	CM000057
00483	017122		MOVE CF-RCAL TO LRCAL.	CM000057
00484	017123		WRITE LIST FROM OATLN AFTER OSKP.	
00485	017124		MOVE ' ' TO OSKP	
00486	017125		WRITE OUTFIL FROM C-FIL.	CM000057
00487	017126	ADD	1 TO EJCT.	
00488	017127		GO TO CK-JCT.	CM000057
00489	017128	CK-TC.		
00490	017129		MOVE 1 TO SUB1.	CM000057
00491	017130	CK1.		CM000057
00492	017131		IF SUB1 > SUB GO TO CX.	CM000057
00493	017132		IF CF-TC = HRC-PC (SUB1)	CM000057
00494	017133		MOVE SPACE TO CF-TC CF-PARM.	CM000057
00495	017134		ADD 1 TO SUB1. GO TO CK1.	CM000057
00496	017135	CX.	EXIT.	CM000057
00497	017136	ALLJ.		CM000057
00498	017137		CLOSE C-FILE KARDS NU-FILE OUTFILE LISTING.	CM000057
00499	017138		STOP RUN.	CM000057
00500	017139	CK-JCT.		CM000057
00501	017140		IF EJCT > 52 MOVE 0 TO EJCT	CM000057
00502	017141		WRITE LIST FROM HEADER AFTER SKP	CM000057
00503	017142		MOVE '0' TO DSKP	
00504	017143		MOVE '1' TO SKP.	
00505	017144		GO TO EJ82.	CM000057
00506	017145	PAR-ZZ.		CM000057
00507	017146		DISPLAY 'NO DATA CARDS' FOR HEAD-N'	CM000057
00508	017147		CLOSE KARDS.	CM000057
00509	017148		STOP RUN.	
00510	017149	END-JOB1.		CM000057

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00511 019060 DISPLAY *ARO-IND WRONG * C-IND STOP RUN.

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00001	00101	IDENTIFICATION DIVISION.		CM000019
00002	00102	PROGRAM-ID. 'CM000019'.		CM000019
00003	00104	ENVIRONMENT DIVISION.		CM000019
00004	00105	CONFIGURATION SECTION.		CM000019
00005	00106	SOURCE-COMPUTER. IBM-360 H50.		CM000019
00006	** 107	OBJECT-COMPUTER. IBM-360 H50.		CM000019
00007	00108	INPUT-OUTPUT SECTION.		CM000019
00008	00109	FILE-CONTROL.		CM000019
00009	** 110	SELECT A-FILE ASSIGN 'AFILERE' UTILITY.		
00010	111	SELECT B-FILE ASSIGN 'BFILERE' UTILITY.		
00011	112	SELECT C-FILE ASSIGN 'CFILERE' UTILITY.		
00012	113	SELECT I-FILE ASSIGN 'IFILERE' UTILITY.		
00013	114	SELECT PRT-A ASSIGN 'APRTOUT' UTILITY.		
00014	115	SELECT PRT-B ASSIGN 'BPRTOUT' UTILITY.		
00015	116	SELECT D-CARD ASSIGN 'CPRTOUT' UTILITY.		
00016	117	SELECT NPATCHI ASSIGN 'PATIN' UTILITY.		
00017	118	SELECT NHOOKI ASSIGN 'HOKIN' UTILITY.		
00018		SELECT B-UPTAPE ASSIGN 'BTAPE' UTILITY.		
00019		SELECT C-UPTAPE ASSIGN 'CTAPE' UTILITY.		
00020	00201	DATA DIVISION.		CM000019
00021	00202	FILE SECTION.		CM000019
00022	00203	FO A-FILE	RECORD CONTAINS 80 CHARACTERS	CM000019
00023	00204		LABEL RECORDS ARE STANDARD	CM000019
00024	00205		RECORDING MODE IS F	CM000019
00025	** 206		BLOCK CONTAINS 45 RECORDS	
00026	00207		DATA RECORD IS A-CARD.	CM000019
00027	00208	01 A-CARD.		CM000019
00028	** 209	02 FILLER	PICTURE X(4).	
00029	210	02 A1B-IN	PICTURE S9.	CM000019
00030	211	02 FILLER	PICTURE X(75).	
00031	00701	FO B-FILE	RECORD CONTAINS 80 CHARACTERS	CM000019
00032	00702		LABEL RECORDS ARE STANDARD	CM000019
00033	00703		RECORDING MODE IS F	CM000019
00034	** 704		BLOCK CONTAINS 45 RECORDS	
00035	00705		DATA RECORD IS B-CARD.	CM000019
00036	00706	01 B-CARD.		CM000019
00037	** 707	02 B1	PICTURE X(4).	CM000019
00038	00708	02 B2	PICTURE 9.	CM000019
00039	00709	02 B3.		CM000019
00040	00710	03 B3A	PICTURE X.	CM000019
00041	00711	03 B3B	PICTURE X(3).	CM000019
00042	00712	03 B3C	PICTURE X.	CM000019
00043	00713	02 B3R	REDEFINES B3.	CM000019
00044	00714	03 B3RA	PICTURE XX.	CM000019
00045	00715	03 B3RB	PICTURE XX.	CM000019
00046	00716	03 B3RC	PICTURE X.	CM000019
00047	** 7161	02 B3RR	REDEFINES B3R.	CM000019
00048	7162	03 B3RRA	PICTURE XXXX.	CM000019
00049	7163	03 B3RRB	PICTURE X.	CM000019
00050	7164	02 B3R-R	REDEFINES B3.	
00051	7165	03 N-B1	PICTURE X.	
00052	7166	03 N-B2	PICTURE X.	
00053	7167	03 N-B3	PICTURE X.	
00054	7168	03 N-B4	PICTURE X.	

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00055	7169	03	N-B5	PICTURE X.	
00056	00717	02	B4	PICTURE X(24).	CH000019
00057	00718	02	B5.		CH000019
00058	00719	03	B5A	PICTURE XX.	CH000019
00059	00720	03	B5B	PICTURE XX.	CH000019
00060	** 7201	02	B5R	REDEFINES B5.	
00061	7202	03	B5AR	PICTURE X.	
00062	7203	03	B5BR	PICTURE X(3).	
00063	7204	02	B5RR	REDEFINES B5R.	
00064	7205	03	B5ARR	PICTURE XX.	
00065	7206	03	B5BRR	PICTURE X.	
00066	7207	03	B5CRR	PICTURE X.	
00067	00721	02	B6.		CH000019
00068	00723	03	B6B	PICTURE X(3).	CH000019
00069	**00722	03	B6A	PICTURE X(6).	CH000019
00070	00801	02	B7.		CH000019
00071	00802	03	B7A	PICTURE XX.	CH000019
00072	00803	03	B7A1	PICTURE X.	CH000019
00073	00804	03	B7B	PICTURE X(3).	CH000019
00074	00805	03	B7C	PICTURE X.	CH000019
00075	00806	02	B7R	REDEFINES B7.	CH000019
00076	00807	03	B7RA	PICTURE X(3).	CH000019
00077	00808	03	B7RB	PICTURE X.	CH000019
00078	00809	03	B7RC	PICTURE X(3).	CH000019
00079	00810	02	B8.		CH000019
00080	00812	03	B8B	PICTURE X(3).	CH000019
00081	**00811	03	B8A	PICTURE X(6).	CH000019
00082	00813	02	B9.		CH000019
00083	00815	03	B9B	PICTURE X(3).	CH000019
00084	**00814	03	B9A	PICTURE X(4).	CH000019
00085	00816	02	B10	PICTURE X(9).	CH000019
00086	00817	02	B11	PICTURE X.	CH000019
00087	00901	FD	C-FILE	RECORD CONTAINS 80 CHARACTERS	CH000019
00088	00902			LABEL RECORDS ARE STANDARD	CH000019
00089	00903			RECORDING MODE IS F	CH000019
00090	** 904			BLOCK CONTAINS 45 RECORDS	
00091	00905			DATA RECORD IS C-CARD.	CH000019
00092	00906	01	C-CARD.		CH000019
00093		02	C1	PICTURE X.	
00094		02	C1AAA	PICTURE XXX.	
00095	00908	02	C2.	PICTURE 9.	CH000019
00096	** 909	02	C3	PICTURE X(7).	CH000019
00097	00910	02	C4.		CH000019
00098	00911	03	C4A	PICTURE X(7).	CH000019
00099	00912	03	C4B	PICTURE X(3).	CH000019
00100	00913	03	C4C	PICTURE X.	CH000019
00101	00914	02	C5	PICTURE X(9).	CH000019
00102	** 915	02	C6	PICTURE X(9).	
00103	00916	02	C7.		CH000019
00104	** 917	03	C7A	PICTURE X(6).	
00105	00918	03	C7B	PICTURE X.	CH000019
00106	00919	02	C8	PICTURE X(4).	CH000019
00107	** 920	02	C9	PICTURE X.	
00108	00921	02	C10.		CH000019
00109	00922	03	C10A	PICTURE X(9).	
00110	00924	C2	C11.		CH000019
00111	00925	03	C11A	PICTURE X(9).	CH000019

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00112	01001		03	C11B	PICTURE X(3).	CM000019
00113	** 1002		02	C12.		
00114	10021		03	C12A	PICTURE XX.	
00115	10022		03	C12B	PICTURE XX.	
00116	10023		03	C12C	PICTURE XX.	
00117	01101	FD	I-FILE		RECORD CONTAINS 80 CHARACTERS	CM000019
00118	01102				LABEL RECORDS ARE STANDARD	CM000019
00119	01103				RECORDING MODE IS F	CM000019
00120	01104				BLOCK CONTAINS 10 RECORDS	
00121	** 1105				DATA RECORDS ARE I-CARD OPT-CARD.	
00122	11051	01	OPT-CARD.			
00123	11052		02	OPT-CALDATE	PICTURE 9(6).	
00124			02	OPT-LISTC	PICTURE X.	
00125			02	FILLER	PICTURE X(72).	
00126	** 11054		02	CK-OPTT	PICTURE X.	
00127	11054		03	CKPTT	VALUE '0'.	
00128	01106	01	I-CARD.			CM000019
00129	01107		02	I1	PICTURE X(9).	CM000019
00130	01108		02	I2	PICTURE 9.	CM000019
00131	01109		02	I3	PICTURE X(18).	
00132	** 1110		02	I4.		
00133	11101		03	I4A	PICTURE XX.	
00134	11102		03	I4B	PICTURE X.	
00135	** 11102		03	I4C	PICTURE X.	
00136	11103	02		I4R	REDEFINES I4.	
00137	11104		03	I4AR	PICTURE X.	
00138	11105		03	I4BR	PICTURE XX.	
00139	11106		03	I4CR	PICTURE X.	
00140	1111	02	I5	PICTURE X(9).	CM000019	
00141	01112	02	I6.		CM000019	
00142	01113	03	I6A	PICTURE X.	CM000019	
00143	** 1114	03	I6B	PICTURE X(6).		
00144	01115	03	I6C	PICTURE X.	CM000019	
00145	01116	03	I6D	PICTURE X(3).	CM000019	
00146	01117	03	I6E	PICTURE X.	CM000019	
00147	01118	02	I6R	REDEFINES I6.	CM000019	
00148	01119	03	I6RA	PICTURE X.	CM000019	
00149	01120	03	I6RB	PICTURE X(7).	CM000019	
00150	01121	03	I6RC	PICTURE X(3).	CM000019	
00151	01122	03	I6RD	PICTURE X.	CM000019	
00152	01123	02	I7.		CM000019	
00153	** 1124	03	I7A	PICTURE X.	CM000019	
00154	1125	03	I7B	PICTURE X.	CM000019	
00155	1126	03	I7C	PICTURE X.	CM000019	
00156	1127	03	I7D	PICTURE X.	CM000019	
00157	1128	03	I7E	PICTURE X.	CM000019	
00158	1129	02	I7R	REDEFINES I7.	CM000019	
00159	1130	03	I7AR	PICTURE XX.	CM000019	
00160	1131	03	I7BR	PICTURE XX.	CM000019	
00161	1132	03	I7CR	PICTURE X.	CM000019	
00162	1133	02	I7RR	REDEFINES I7R.	CM000019	
00163	1134	03	I7ARR	PICTURE X.	CM000019	
00164	1135	03	I7BRR	PICTURE XXX.	CM000019	
00165	1136	03	I7CRR	PICTURE X.	CM000019	
00166	01206	02	I8.		CM000019	
00167	** 1207	03	I8A	PICTURE X.	CM000019	
00168	1208	03	I8B	PICTURE X.	CM000019	

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00169	1209	03	I8C	PICTURE X.	CM000019
00170	1210	03	I8D	PICTURE X.	CM000019
00171	1213	03	I8E	PICTURE X.	CM000019
00172	1214	02	I8R	REDEFINES I8.	CM000019
00173	1215	03	I8AR	PICTURE XX.	CM000019
00174	1216	03	I8RR	PICTURE XX.	CM000019
00175	1217	03	I8CR	PICTURE X.	CM000019
00176	1218	02	I8RR	REDEFINES I8R.	CM000019
00177	1219	03	I8ARR	PICTURE X.	CM000019
00178	1220	03	I8RRR	PICTURE XXX.	CM000019
00179	1221	03	I8CRR	PICTURE X.	CM000019
00180	1222	02	I9.		CM000019
00181	1223	03	I9A	PICTURE X.	CM000019
00182	1224	03	I9B	PICTURE X.	CM000019
00183	1225	03	I9C	PICTURE X.	CM000019
00184	1226	03	I9D	PICTURE X.	CM000019
00185	1227	03	I9E	PICTURE X.	CM000019
00186	1228	02	I9R	REDEFINES I9.	CM000019
00187	1229	03	I9AR	PICTURE XX.	CM000019
00188	1230	03	I9BR	PICTURE XX.	CM000019
00189	1231	03	I9CR	PICTURE X.	CM000019
00190	1232	02	I9RR	REDEFINES I9R.	CM000019
00191	1233	03	I9ARR	PICTURE X.	CM000019
00192	1234	03	I9RRR	PICTURE XXX.	CM000019
00193	1235	03	I9CRR	PICTURE X.	CM000019
00194	1236	02	I10.		CM000019
00195	1237	03	I10A	PICTURE X.	CM000019
00196	1238	03	I10B	PICTURE X.	CM000019
00197	1239	03	I10C	PICTURE X.	CM000019
00198	1240	03	I10D	PICTURE X.	CM000019
00199	1241	03	I10E	PICTURE X.	CM000019
00200	1242	02	I10R	REDEFINES I10.	CM000019
00201	1243	03	I10AR	PICTURE XX.	CM000019
00202	1244	03	I10BR	PICTURE XX.	CM000019
00203	1245	03	I10CR	PICTURE X.	CM000019
00204	1246	02	I10RR	REDEFINES I10R.	CM000019
00205	1247	03	I10ARR	PICTURE X.	CM000019
00206	1248	03	I10RRR	PICTURE XXX.	CM000019
00207	1249	03	I10CRR	PICTURE X.	CM000019
00208	1250	02	I11	PICTURE XX.	CM000019
00209	1251	02	I12	PICTURE X(4).	CM000019
00210	1252	02	I13	PICTURE X.	CM000019
00211	01301	FD	PRT-A	RECORD CONTAINS 133 CHARACTERS	CM000019
00212	01302			LABEL RECORDS ARE STANDARD	CM000019
00213	01303			RECORDING MODE IS F	CM000019
00214	01304			BLOCK CONTAINS 1 RECORDS	CM000019
00215	01305			DATA RECORD IS PAT-PRT.	CM000019
00216	01306	01	PAT-PRT.		CM000019
00217	01307	02	FILLER	PICTURE X(133).	CM000019
00218	01308	FD	PRT-B	RECORD CONTAINS 133 CHARACTERS	CM000019
00219	01309			LABEL RECORDS ARE STANDARD	CM000019
00220	01310			RECORDING MODE IS F	CM000019
00221	01311			BLOCK CONTAINS 1 RECORDS	CM000019
00222	01312			DATA RECORD IS HK-PRT.	CM000019
00223	01313	01	HK-PRT.		CM000019
00224	01314	02	FILLER	PICTURE X(133).	CM000019
00225	** 1315	FD	O-CARD	RECORD CONTAINS 133 CHARACTERS	CM000019

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00226	01316		LABEL RECORDS ARE STANDARD	CM000019
00227	01317		RECORDING MODE IS F	CM000019
00228	01318		BLOCK CONTAINS 12 RECORDS	
00229	01319		DATA RECORD IS PRT-REC.	
00230	** 1320	01	PRT-REC PICTURE X(133).	
00231	** 46	FD	NPATCHI RECORDING F RECORD 133 BLOCK 1 RECORDS	
00232	47		LABEL RECORDS STANDARD DATA RECORD NPATI.	
00233	48	01	NPATI PICTURE X(133).	
00234	49	FD	NHOOKI RECORDING F BLOCK 1 RECORDS RECORD 133	
00235	50		LABEL RECORDS STANDARD DATA RECORD NOOKI.	
00236	51	01	NOOKI PICTURE X(133).	
00237		FO	B-UPTAPE RECORDING F BLOCK 1 RECORDS RECORD 80	
00238			LABEL RECORDS STANDARD DATA RECORD B-UPAPER.	
00239		01	B-UPAPER PICTURE X(80).	
00240		FO	C-UPTAPE RECORDING F BLOCK 1 RECORDS RECORD 80	
00241			LABEL RECORDS STANDARD DATA RECORD C-UPAPER.	
00242		01	C-UPAPER PICTURE X(80).	
00243	01401		WORKING-STORAGE SECTION.	CM000019
00244	01402	77	P-CNT PICTURE S9 COMPUTATIONAL-3 VALUE ZERO.	CM000019
00245	014030	77	C-SUB PICTURE S9999 COMPUTATIONAL-3 VALUE 0.	
00246	** 14031	77	OC-SUB PICTURE S999 COMPUTATIONAL-3 VALUE ZERO.	CM000019
00247	14032	77	OB-SUB PICTURE 9999 COMPUTATIONAL-3 VALUE ZERO.	
00248	1404	77	B-SUB PICTURE S9999 COMPUTATIONAL-3 VALUE 0.	
00249	01405	77	CSW-1 PICTURE S9 COMPUTATIONAL-3 VALUE ZERO.	CM000019
00250	01406	77	CSW-2 PICTURE S9 COMPUTATIONAL-3 VALUE ZERO.	CM000019
00251	01407	77	C-SW PICTURE X VALUE SPACE.	CM000019
00252	01408	77	FLIP-SW PICTURE S99 COMPUTATIONAL-3 VALUE ZERO.	CM000019
00253	** 1409	77	S-ST1 PICTURE S9 COMPUTATIONAL-3 VALUE ZERO.	
00254	1410	77	S-ST2 PICTURE XXX VALUE SPACE.	
00255	1411	77	S-ST3 PICTURE XXX VALUE SPACE.	
00256	1412	77	STA-SW PICTURE S9 COMPUTATIONAL-3 VALUE ZERO.	
00257	1413	77	ST-1 PICTURE XX VALUE SPACE.	
00258	1414	77	ST-2 PICTURE X(4) VALUE SPACE.	
00259	** 1414	77	ST-3 PICTURE XX VALUE SPACE.	
00260	1416	77	ST-4 PICTURE XXX VALUE SPACE.	
00261	1417	77	ST-5 PICTURE X VALUE SPACE.	
00262	1418	77	ST-6 PICTURE X VALUE SPACE.	
00263	1419	77	ST-7 PICTURE X(5) VALUE SPACE.	
00264	1420	77	APT-SUB PICTURE S99 COMPUTATIONAL-3 VALUE ZERO.	
00265	1421	77	SCA-SW PICTURE S9 COMPUTATIONAL-3 VALUE ZERO.	
00266	01422	77	PB-SW2 PICTURE S9 COMPUTATIONAL-3 VALUE ZERO.	CM000019
00267	01423	77	B-ST PICTURE XXX VALUE SPACE.	CM000019
00268	01424	77	D-SW1 PICTURE S9 COMPUTATIONAL-3 VALUE ZERO.	CM000019
00269	01425	77	D-SW2 PICTURE S9 COMPUTATIONAL-3 VALUE ZERO.	CM000019
00270	01501	77	D-SW4 PICTURE S9 COMPUTATIONAL-3 VALUE ZERO.	CM000019
00271	01502	77	R-ST PICTURE XXX VALUE SPACE.	CM000019
00272		77	IFCLIST PICTURE X.	
00273	01503	77	PL-CK PICTURE S9 COMPUTATIONAL-3 VALUE ZERO.	CM000019
00274	01513	77	THRU-SW PICTURE S9 COMPUTATIONAL-3 VALUE ZERO.	CM000019
00275	01516	77	LN-CTR PICTURE S99 COMPUTATIONAL-3 VALUE ZERO.	CM000019
00276	01519	77	CPRT1 PICTURE S9 COMPUTATIONAL-3 VALUE ZERO.	CM000019
00277	01524	77	HK-SUB PICTURE S9 COMPUTATIONAL-3 VALUE ZERO.	CM000019
00278	** 1526	77	AL-SUB PICTURE S9 COMPUTATIONAL-3 VALUE ZERO.	
00279	1527	77	BSW-1 PICTURE S9 COMPUTATIONAL-3 VALUE ZERO.	CM000019
00280	1528	77	BSW-2 PICTURE S9 COMPUTATIONAL-3 VALUE ZERO.	CM000019
00281	** 1528	77	PAT-SUB PICTURE S99 COMPUTATIONAL-3 VALUE ZERO.	CM000019
00282	1531	77	N-SUB PICTURE S99 COMPUTATIONAL-3 VALUE ZERO.	CM000019

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00283	1534	77	SQ-SUB	PICTURE S9 COMPUTATIONAL-3 VALUE ZERO.	CM000019
00284	1536	77	O-SW3	PICTURE S9 COMPUTATIONAL-3 VALUE ZERO.	
00285	** 1536	77	SQUID-COUNT	PICTURE S9 COMPUTATIONAL-3 VALUE ZERO.	
00286	015390	77	R-TJT	PICTURE S9999 COMPUTATIONAL-3 VALUE 0.	
00287	** 1540	77	ITFM-NO	PICTURE X(4).	
00288	1541	77	Z-TOT	PICTURE S999 COMPUTATIONAL-3 VALUE ZERO.	CM000019
00289	1542	77	PB-SW1	PICTURE S9 COMPUTATIONAL-3 VALUE ZERO.	
00290	015430	77	HK-CTR	PICTURE 99 COMPUTATIONAL-3 VALUE 0.	
00291	** 1544	77	17-SWT	PICTURE 9 COMPUTATIONAL-3 VALUE 0.	
00292	015450	77	M-SW1	PICTURE 9 COMPUTATIONAL-3 VALUE 0.	
00293	015470	77	M-SW2	PICTURE 9 COMPUTATIONAL-3 VALUE 0.	
00294	015500	77	M-SW3	PICTURE 9 COMPUTATIONAL-3 VALUE 0.	
00295	** 15510	77	SUB36	PICTURE 99 VALUE 0.	
00296	** 20	77	A-CT	PICTURE 99 COMPUTATIONAL-3 VALUE 0.	CM000020
00297	21	77	B-CT	PICTURE 99 COMPUTATIONAL-3 VALUE 0.	CM000020
00298		77	TSTCELL	PICTURE X.	
00299	22	77	C-CT	PICTURE 99 COMPUTATIONAL-3 VALUE 0.	CM000020
00300		77	CF-SW	PICTURE 9 VALUE 0.	
00301		01	CNG-PZ7.		
00302		02	PZM.		
00303		03	PZ1	PICTURE X.	
00304		03	PZ2	PICTURE X.	
00305		03	PZ3	PICTURE X.	
00306		03	PZ4	PICTURE X.	
00307	2134	02	PZMP.		
00308		03	PZMP1	PICTURE X.	
00309		03	PZMP2	PICTURE X.	
00310		03	PZMP3	PICTURE X.	
00311		03	PZMP4	PICTURE X.	
00312		01	M-STORES.		
00313		02	M-1ST.		
00314		03	M-ST1	PICTURE XXXX.	
00315		03	M-ST1B	PICTURE X.	
00316		02	M-2ST.		
00317		03	M-ST2	PICTURE XXXX.	
00318		03	M-ST2B	PICTURE X.	
00319		02	M-3ST.		
00320		03	M-ST3	PICTURE XXXX.	
00321		03	M-ST3B	PICTURE X.	
00322		02	M-4ST.		
00323		03	M-ST4	PICTURE XXXX.	
00324		03	M-ST4B	PICTURE X.	
00325		02	M-5ST.		
00326		03	M-ST5	PICTURE XXXX.	
00327		03	M-ST5B	PICTURE X.	
00328		02	M-6ST.		
00329		03	M-ST6	PICTURE XXXX.	
00330		03	M-ST6B	PICTURE X.	
00331	** 1608	01	O-CALDATE.		
00332	1609	02	O-CMD	PICTURE XX.	
00333	1610	02	O-COV	PICTURE XX.	
00334	1611	02	O-CYR	PICTURE XX.	
00335	01613	01	AERR.		CM000019
00336	** 1614	02	AEF	PICTURE X VALUE '0'.	CM000019
00337	1614	02	FILLFR	PICTURE X(7) VALUE 'I-CARD '.	CM000019
00338	01615	02	AEA	PICTURE X(9) VALUE SPACE.	CM000019
00339	01616	02	FILLFR	PICTURE X(19) VALUE ' INSTR ASSIGNED TO '.	CM000019

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00340	01617	C2	AFB	PICTURE X(9) VALUE SPACE.	CM000019
00341	** 01618	02	FILLER	PICTURE X(88).	CM000019
00342	01619	01	RERR.		CM000019
00343	01620	02	RFE	PICTURE X VALUE '0'.	CM000019
00344	01621	02	FILLER	PICTURE X(9) VALUE 'ERROR AT '.	CM000019
00345	** 01622	C2	BEA	PICTURE 9(3).	
00346	01623	02	FILLER	PICTURE X(9) VALUE 'ON INPUT '.	CM000019
00347	01624	02	BEB	PICTURE X(9) VALUE SPACE.	CM000019
00348	** 01625	C2	FILLFR	PICTURE X(102).	CM000019
00349	01701	01	CERR.		CM000019
00350	01702	02	CEF	PICTURE X VALUE '0'.	CM000019
00351	01703	02	FILLFR	PICTURE X(12) VALUE 'INST. N/A IN'.	CM000019
00352	01704	02	CEA	PICTURE X(9).	CM000019
00353	01705	02	FILLER	PICTURE X(4) VALUE ' AT '.	CM000019
00354	01706	C2	CEB	PICTURE 9(3).	CM000019
00355	** 01707	C2	FILLER	PICTURE X(104).	CM000019
00356	01708	01	PATTAB.		
00357	01709	02	APT1	PICTURE X(4) OCCURS 96 TIMES.	CM000019
00358	01710	02	APT1A	PICTURE 9 OCCURS 96 TIMES.	
00359	01711	02	APT2	PICTURE X(9) OCCURS 96 TIMES.	
00360	01712	C2	APT3	PICTURE X(7) OCCURS 96 TIMES.	
00361	01713	C2	APT4	PICTURE X(9) OCCURS 96 TIMES.	CM000019
00362	** 01714	02	APT5	PICTURE 9 OCCURS 96 TIMES.	
00363	01801	01	R-TEMP.		CM000019
00364	** 01802	C2	BT1	PICTURE X(4).	CM000019
00365	01803	02		BT2 PICTURE 9.	CM000019
00366	01804	C2		BT3.	CM000019
00367	01805	03	BT3A	PICTURE X.	CM000019
00368	01806	03	BT3B	PICTURE X(3).	CM000019
00369	01807	03	BT3C	PICTURE X.	CM000019
00370	01808	02	B3TR	REDEFINES BT3.	CM000019
00371	01809	03	B3TRA	PICTURE XX.	CM000019
00372	01810	03	B3TRB	PICTURE XX.	CM000019
00373	01811	03	B3TRC	PICTURE X.	CM000019
00374	018111	C2	B3TRR	REDEFINES B3TR.	CM000019
00375	018112	03	B3TRRA	PICTURE XXXX.	CM000019
00376	018113	03	B3TRRB	PICTURE X.	CM000019
00377	01812	02	BT4	PICTURE X(24).	CM000019
00378	01813	C2	BT5.		CM000019
00379	01814	03	BT5A	PICTURE XX.	CM000019
00380	01815	03	BT5B	PICTURE XX.	CM000019
00381	01816	C2	BT6.		CM000019
00382	01818	03	BT6B	PICTURE X(3).	CM000019
00383	** 01817	03	BT6A	PICTURE X(6).	CM000019
00384	01819	02	BT7.		CM000019
00385	01820	03	BT7A	PICTURE XX.	CM000019
00386	01821	03	BT7A1	PICTURE X.	CM000019
00387	01822	03	BT7B	PICTURE X(3).	CM000019
00388	01823	03	BT7C	PICTURE X.	CM000019
00389	01824	C2	BT7R	REDEFINES BT7.	CM000019
00390	01825	03	BT7RA	PICTURE X(3).	CM000019
00391	01901	03	BT7RB	PICTURE X.	CM000019
00392	01902	03	BT7RC	PICTURE X(3).	CM000019
00393	01903	C2	BT8.		CM000019
00394	01905	03	BT8B	PICTURE X(3).	CM000019
00395	** 01904	03	BT8A	PICTURE X(6).	CM000019
00396	01906	C2	BT9.		CM000019

00397	01908	03	BT9B	PICTURE X(3).	CM000019
00398	**01907	03	BT9A	PICTURE X(4).	CM000019
00399	01909	02	BT10	PICTURE X(9).	CM000019
00400	01910	02	BT11	PICTURE X.	CM000019
00401	02001	01	SQCK-LN.		CM000019
00402	**2002	02	FILLER	PICTURE X(4).	
00403	20021	02	A1B5	PICTURE 9.	
00404	**20021	02	A1B6	REDEFINES A1B5.	
00405	**20021	03	A1A6	PICTURE X.	
00406	20022	02	FILLER	PICTURE X(40).	
00407	02003	02	A135A	PICTURE X.	CM000019
00408	**20031	02	A135B	PICTURE X.	CM000019
00409	20032	02	A13R8	REDEFINES A135B PICTURE 9.	CM000019
00410	2004	02	FILLER	PICTURE X(6).	CM000019
00411	2005	02	A155A	PICTURE X.	
00412	20051	02	A155B	PICTURE X.	CM000019
00413	20052	02	A15R8	REDEFINES A155B PICTURE 9.	CM000019
00414	2008	02	FILLER	PICTURE X(6).	CM000019
00415	2009	02	A185A	PICTURE X.	
00416	20091	02	A185B	PICTURE X.	CM000019
00417	20092	02	A18R8	REDEFINES A185B PICTURE 9.	CM000019
00418	2010	02	FILLER	PICTURE X(17).	
00419	2019	01	ALN-TAB.		
00420	2020	02	ALN	PICTURE X(80) OCCURS 6 TIMES.	CM000019
00421	02101	01	SQTAB.		CM000019
00422	**2102	02	QPRTA	PICTURE X(4) OCCURS 6 TIMES.	CM000019
00423	2103	02	QPRTB	PICTURE 9 OCCURS 6 TIMES.	CM000019
00424	2104	02	QPRTC	PICTURE X(5) OCCURS 6 TIMES.	CM000019
00425	21051	02	QPRTD	PICTURE S9 COMPUTATIONAL-3 OCCURS 6 TIMES.	CM000019
00426	21062	02	QPRTE	PICTURE X(9) OCCURS 6 TIMES.	CM000019
00427	21063	02	QPRTF	PICTURE X(9) OCCURS 6 TIMES.	
00428	02105	01	ADOUT-PRT.		CM000019
00429	021051	02	CCA	PICTURE X VALUE '0'.	CM000019
00430	**2106	02	FILLER	PICTURE X(6) VALUE SPACE.	CM000019
00431	2107	02	FILLER	PICTURE X VALUE 'C'.	CM000019
00432	2108	02	FILLER	PICTURE X(15) VALUE SPACE.	CM000019
00433	2109	02	FILLER	PICTURE X(12) VALUE 'FROM TO'.	CM000019
00434	2110	02	FILLER	PICTURE X(48) VALUE SPACE.	
00435	21101	02	FILLER	PICTURE X(50) VALUE 'C FROM TO	
00436	21102-				
00437	2111	01	ADOUT-PRT.		CM000019
00438	21111	02	CCAA	PICTURE X VALUE 'I'.	CM000019
00439	21112	02	FILLER	PICTURE X(26) VALUE 'ITEM C DEVICE POIN'.	CM000019
00440	21113	02	FILLER	PICTURE X(11) VALUE 'T POINT'.	
00441	21114	02	FILLER	PICTURE X(39) VALUE SPACE.	
00442	21115	02	FILLER	PICTURE X(56) VALUE 'ITEM C DEVICE POINT	
00443	21116-				
00444	02112	01	ADOUT-PRT.		CM000019
00445	02113	02	CCB	PICTURE X VALUE '0'.	CM000019
00446	**2114	02	PAT1	PICTURE X(4).	CM000019
00447	2115	02	FILLER	PICTURE XX VALUE SPACE.	CM000019
00448	2116	02	PAT1A	PICTURE 2.	
00449	2117	02	FILLER	PICTURE XXX VALUE SPACE.	CM000019
00450	2118	02	PAT2	PICTURE X(9).	CM000019
00451	2119	02	FILLER	PICTURE XXX VALUE SPACE.	CM000019
00452	2120	02	PAT3	PICTURE X(7).	CM000019
00453	2121	02	FILLER	PICTURE XXX VALUE SPACE.	CM000019

00454	2122	02	PAT4	PICTURE X(9).		CM000019
00455	2123	02	FILLER	PICTURE X(35) VALUE SPACE.		
00456	21231	02	TAP1	PICTURE XXXX VALUE SPACE.		
00457	2124	02	FILLER	PICTURE XX VALUE SPACE.		
00458	2125	02	TAP1A	PICTURE Z.		
00459	2126	02	FILLER	PICTURE XXX VALUE SPACE.		
00460	2127	02	TAP2	PICTURE X(9).		
00461	2128	02	FILLER	PICTURE XXX VALUE SPACE.		
00462	2129	02	TAP3	PICTURE X(7).		
00463	2130	02	FILLER	PICTURE XXX VALUE SPACE.		
00464	2131	02	TAP4	PICTURE X(9).		
00465	** 2123	02	FILLER	PICTURE X(9) VALUE SPACE.		
00466	2133	02	PAT36	PICTURE 99.		
00467	2134	02	PZPAT	PICTURE XXXX.		
00468	02201	01	COU-PRY.			CM000019
00469	02202	02	CCC	PICTURE X VALUE '0'.		CM000019
00470	** 2203	02	FILLER	PICTURE X(26) VALUE ' C		CM000019
00471	2204	02	FILLER	PICTURE X(26) VALUE ' TRAN TRAN		CM000019
00472	2205	02	FILLER	PICTURE X(26) VALUE 'CONNECTING WIRED UDC		CM000019
00473	2206	02	FILLER	PICTURE X(26) VALUE ' SIG. SIG.		CM000019
00474	2207	02	FILLER	PICTURE X(26) VALUE ' TYP CAB LOC ITEM C		CM000019
00475	2208	02	FILLER	PICTURE X(26) VALUE ' .		CM000019
00476	02209	01	DOU-PRY.			CM000019
00477	02210	02	CCD	PICTURE X VALUE ' .		CM000019
00478	** 2211	02	FILLER	PICTURE X(26) VALUE 'PARAMETER C NOMENCLATURE		CM000019
00479	2212	02	FILLER	PICTURE X(26) VALUE ' CARD I-NO. DEV1		CM000019
00480	2213	02	FILLER	PICTURE X(26) VALUE 'CE POINT S.C. CARD		CM000019
00481	2214	02	FILLER	PICTURE X(26) VALUE ' COND. COND. READOUT		CM000019
00482	2215	02	FILLER	PICTURE X(26) VALUE ' NO. FAB SK. NO C		CM000019
00483	22151	02	FILLER	PICTURE X(26) VALUE ' .		
00484	02216	01	EDU-PRY.			
00485	02217	02	CCE	PICTURE X VALUE '0'.		
00486	02219	02	PBT1	PICTURE X(9).		
00487	** 2220	02	FILLER	PICTURE X VALUE SPACE.		
00488	22201	02	PBT1A	PICTURE 9.		
00489	22202	02	FILLER	PICTURE X VALUE SPACE.		
00490	02221	02	PBT2	PICTURE X(18).		
00491	02222	02	FILLER	PICTURE XXX VALUE SPACE.		
00492	02223	02	PBT3	PICTURE X(4).		
00493	** 2224	02	FILLER	PICTURE XX VALUE SPACE.		
00494	022250	02	PBT4	PICTURE X(6).		
00495	** 2301	02	FILLER	PICTURE X(3) VALUE SPACE.		
00496	2302	02	PBT5A	PICTURE X(9).		
00497	23021	02	FILLER	PICTURE X VALUE SPACE.		
00498	23023	02	PBT5B	PICTURE X(7).		
00499	23024	02	FILLER	PICTURE XX VALUE SPACE.		
00500	2304	02	PBT6	PICTURE X(5).		
00501	** 2303	02	FILLER	PICTURE X VALUE SPACE.		
00502	2305	02	FILLER	PICTURE X VALUE SPACE.		
00503	023060	02	PBT7	PICTURE X(4).		
00504	** 2307	02	FILLER	PICTURE XXX VALUE SPACE.		CM000019
00505	02308	02	PBT8	PICTURE X(5).		CM000019
00506	** 2309	02	FILLER	PICTURE XXX VALUE SPACE.		CM000019
00507	2310	02	PBT9	PICTURE X(5).		
00508	2311	02	FILLER	PICTURE XXX VALUE SPACE.		CM000019
00509	02312	02	PBT10	PICTURE X(5).		CM000019
00510	023130	02	FILLER	PICTURE X(4) VALUE SPACE.		

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00511	02314	02	PBT11	PICTURE X(4).	
00512	02315	02	FILLER	PICTURE XX VALUE SPACE.	
00513	02316	02	PBT12	PICTURE X(4).	
00514	02317	02	FILLER	PICTURE XX VALUE SPACE.	
00515	02318	02	PBT13	PICTURE XX.	CM000019
00516	023190	02	FILLER	PICTURE XX. VALUE SPACE.	
00517	** 2320	02	PBT14	PICTURE X(4).	CM000019
00518	2321	02	FILLER	PICTURE XX VALUE SPACE.	CM000019
00519	2322	02	PBT15	PICTURE 9.	CM000019
00520	2323	02	FILLER	PICTURE XXX VALUE SPACE.	CM000019
00521	02401	01	HK-TAB.		CM000019
00522	** 2402	02	P1	PICTURE X(9) OCCURS 6 TIMES.	
00523	24021	02	P1A	PICTURE 9 OCCURS 6 TIMES.	
00524	2403	02	P2	PICTURE X(19) OCCURS 6 TIMES.	
00525	2404	02	P3	PICTURE X(4) OCCURS 6 TIMES.	
00526	2405	02	P4	PICTURE X(9) OCCURS 6 TIMES.	
00527	2406	02	P5A	PICTURE X(9) OCCURS 6 TIMES.	
00528	24061	02	P5B	PICTURE X(7) OCCURS 6 TIMES.	
00529	2407	02	P6	PICTURE X(5) OCCURS 6 TIMES.	CM000019
00530	2408	02	P7	PICTURE X(6) OCCURS 6 TIMES.	
00531	2409	02	P8	PICTURE X(5) OCCURS 6 TIMES.	
00532	2410	02	P9	PICTURE X(5) OCCURS 6 TIMES.	CM000019
00533	2411	02	P10	PICTURE X(5) OCCURS 6 TIMES.	
00534	2412	02	P11	PICTURE X(4) OCCURS 24.	
00535	2413	02	P12	PICTURE X(4) OCCURS 24.	
00536	2414	02	P13	PICTURE XX OCCURS 6 TIMES.	
00537	2415	02	P14	PICTURE X(4) OCCURS 6 TIMES.	CM000019
00538	2416	02	P15	PICTURE S9 COMPUTATIONAL-3 OCCURS 6 TIMES.	
00539	2417	02	P16	PICTURE S9 COMPUTATIONAL-3 OCCURS 6 TIMES.	CM000019
00540	02501	01	FOUT-PRT.		CM000019
00541	02502	02	CCF	PICTURE X VALUE '1'.	CM000019
00542	02503	02	FILLER	PICTURE X(53) VALUE SPACE.	CM000019
00543	02504	02	FILLER	PICTURE X(26) VALUE 'HOOKUP INFORMATION DATA'.	CM000019
00544	02505	02	FILLER	PICTURE X(53) VALUE SPACE.	CM000019
00545	02506	01	GOUT-PRT.		CM000019
00546	22507	02	CCG	PICTURE X VALUE '1'.	CM000019
00547	** 2508	02	FILLER	PICTURE X(33) VALUE ' PATCHING - P81	
00548	025081-				
00549	025082	02	FILLER	PICTURE X(45) VALUE SPACE.	
00550	025083	02	FILLER	PICTURE X(31) VALUE ' PATCHING - P82	
00551	** 25084-				
00552	25090	02	FILLER	PICTURE X(22) VALUE SPACE.	
00553	2510	01	O-TEMP.		CM000019
00554	25101	02	O-1	PICTURE X(4).	
00555	2512A	02	O-1A	PICTURE X.	
00556	** 25102	02	O-2	PICTURE X(9).	CM000019
00557	25103	02	FILLER	PICTURE X VALUE 'C'.	CM000019
00558	25104	02	FILLER	PICTURE X(65) VALUE SPACE.	
00559	25105	01	BO-TEMP.		CM000019
00560	25106	02	BO-1	PICTURE X(4).	
00561	** 2510A	02	BO-1A	PICTURE X.	
00562	25107	02	BO-2	PICTURE X(9).	CM000019
00563	25108	02	FILLER	PICTURE X VALUE 'B'.	CM000019
00564	25109	02	FILLER	PICTURE X(65) VALUE SPACE.	CM000019
00565	2517	01	A-TEMP.		CM000019
00566	** 209	02	A1	PICTURE X(4).	
00567	00210	02	A1B	PICTURE 9.	CM000019

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00568 ** 2101	02	A1R	REDEFINES A1B.		
00569 2102	03	A1BR	PICTURE X.		
00570 00211	02	A2	PICTURE X(7).		CM000019
00571 00212	02	A3	PICTURE X.		CM000019
00572 00213	02	A4.			CM000019
00573 ** 214	03	A4A	PICTURE XX.		CM000019
00574 215	03	A4B	PICTURE XX.		CM000019
00575 002151	03	A4C	PICTURE X.		
00576 ** 216	02	A4R	REDEFINES A4.		CM000019
00577 217	03	A4AR	PICTURE X.		CM000019
00578 218	03	A4BR	PICTURE XXX.		CM000019
00579 002181	03	A4CR	PICTURE X.		
00580 ** 219	02	A4RR	REDEFINES A4R.		CM000019
00581 220	03	A4ARR	PICTURE XX.		CM000019
00582 2201	03	A4BRR	PICTURE X.		CM000019
00583 2202	03	A4CRR	PICTURE X.		CM000019
00584 002203	03	A4DRR	PICTURE X.		
00585 00221	02	A5.			CM000019
00586 00222	03	A5A	PICTURE X.		CM000019
00587 00223	03	A5B	PICTURE X(3).		CM000019
00588 00224	03	A5C	PICTURE X.		CM000019
00589 00225	02	A5R	REDEFINES A5.		CM000019
00590 ** 301	03	A5AR	PICTURE XX.		CM000019
00591 302	03	A5BR	PICTURE XX.		CM000019
00592 303	03	A5CR	PICTURE X.		CM000019
00593 00304	02	A6	PICTURE X.		CM000019
00594 00305	02	A7.			CM000019
00595 00306	03	A7A	PICTURE X.		CM000019
00596 00307	03	A7B	PICTURE X(3).		CM000019
00597 00308	03	A7C	PICTURE X.		CM000019
00598 00309	02	A7R	REDEFINES A7.		CM000019
00599 ** 310	03	A7AR	PICTURE XX.		CM000019
00600 311	03	A7BR	PICTURE XX.		CM000019
00601 312	03	A7CR	PICTURE X.		CM000019
00602 00313	02	A8.			CM000019
00603 00314	03	A8A	PICTURE X.		CM000019
00604 00315	03	A8B	PICTURE X(3).		CM000019
00605 00316	03	A8C	PICTURE X.		CM000019
00606 00317	02	A8R	REDEFINES A8.		CM000019
00607 ** 317	03	A8AR	PICTURE XX.		CM000019
00608 318	03	A8BR	PICTURE XX.		CM000019
00609 319	03	A8CR	PICTURE X.		CM000019
00610 00321	02	A9	PICTURE X.		CM000019
00611 00322	02	A10.			CM000019
00612 00323	03	A10A	PICTURE X.		CM000019
00613 00324	03	A10B	PICTURE X(3).		CM000019
00614 00325	03	A10C	PICTURE X.		CM000019
00615 00401	02	A10R	REDEFINES A10.		CM000019
00616 ** 4011	03	A10AR	PICTURE XX.		CM000019
00617 4012	03	A10BR	PICTURE XX.		CM000019
00618 4013	03	A10CR	PICTURE X.		CM000019
00619 00402	02	A11	PICTURE X.		CM000019
00620 00403	02	A12.			CM000019
00621 ** 404	03	A12A	PICTURE XX.		CM000019
00622 ** 05	03	A12B	PICTURE XX.		CM000019
00623 06	02	A12R	REDEFINES A12.		CM000019
00624 07	03	A12AR	PICTURE X.		CM000019

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00625	08		03	A12RR	PICTURE XXX.	CM000019
00626	409	02		A12RR	REDEFINES A12R.	CM000019
00627	4091		03	A12ARR	PICTURE XX.	CM000019
00628	4092		03	A12BRR	PICTURE X.	CM000019
00629	4093		03	A12CRR	PICTURE X.	CM000019
00630	00410	02		A13.		CM000019
00631	00411		03	A13A.		CM000019
00632	00412		04	A13C	PICTURE X.	CM000019
00633	00413		04	A13D	PICTURE X.	CM000019
00634	00414		03	A13B.		CM000019
00635	00415		04	A13E	PICTURE X.	CM000019
00636	00416		04	A13F	PICTURE X.	CM000019
00637	** 417	02		A14.		
00638	418		03	A14A	PICTURE XX.	
00639	419		03	A14B	PICTURE XX.	
00640	4191	02		A14R	REDEFINES A14.	CM000019
00641	4192		03	A14AR	PICTURE X.	CM000019
00642	4193		03	A14BR	PICTURE XXX.	CM000019
00643	4194	02		A14RR	REDEFINES A14R.	CM000019
00644	4195		03	A14ARR	PICTURE XX.	CM000019
00645	4196		03	A14BRR	PICTURE X.	CM000019
00646	4197		03	A14CRR	PICTURE X.	CM000019
00647	00420	02		A15.		CM000019
00648	00421		03	A15A.		CM000019
00649	00422		04	A15C	PICTURE X.	CM000019
00650	00423		04	A15D	PICTURE X.	CM000019
00651	00502	02		A16.		CM000019
00652	00506		03	A16B.		CM000019
00653	00507		04	A16E	PICTURE X.	CM000019
00654	00508		04	A16F	PICTURE X.	CM000019
00655	00509	02		A17.		CM000019
00656	00510		03	A17A	PICTURE XX.	CM000019
00657	00511		03	A17B	PICTURE XX.	CM000019
00658	** 5111	02		A17R	REDEFINES A17.	
00659	5112		03	A17AR	PICTURE X.	
00660	5113		03	A17BR	PICTURE XXX.	
00661	5114	02		A17RR	REDEFINES A17R.	
00662	5115		03	A17ARR	PICTURE XX.	
00663	5116		03	A17BRR	PICTURE X.	
00664	5117		03	A17CRR	PICTURE X.	
00665	00512	02		A18.		CM000019
00666	00513		03	A18A.		CM000019
00667	00514		04	A18C	PICTURE X.	CM000019
00668	00515		04	A18D	PICTURE X.	CM000019
00669	00516		03	A18B.		CM000019
00670	00517		04	A18E	PICTURE X.	CM000019
00671	00518		04	A18F	PICTURE X.	CM000019
00672	00519	02		A19.		CM000019
00673	** 520		03	A19A	PICTURE X.	CM000019
00674	521		03	A19B	PICTURE X(3).	CM000019
00675	522		03	A19C	PICTURE X.	CM000019
00676	523	02		A19R	REDEFINES A19.	CM000019
00677	524		03	A19AR	PICTURE XX.	CM000019
00678	525		03	A19BR	PICTURE XX.	CM000019
00679	5251		03	A19CR	PICTURE X.	CM000019
00680	601	02		A20.		
00681	602		03	A20A	PICTURE XX.	CM000019

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00682	6021	03	A208	PICTURE XX.						CM000019
00683	6022	02	A20R	REDEFINES A20.						CM000019
00684	6023	03	A20AR	PICTURE X.						CM000019
00685	6024	03	A20BR	PICTURE XXX.						CM000019
00686	6025	02	A20RR	REDEFINES A20R.						CM000019
00687	6026	03	A20ARR	PICTURE XX.						CM000019
00688	6027	03	A20BRR	PICTURE X.						CM000019
00689	603	03	A20CRR	PICTURE X.						CM000019
00690	608	02	A21	PICTURE X(4).						
00691	609	02	A22	PICTURE XX.						
00692	** 01	01	AB-HD.							CM000020
00693	202	02	AB8	PICTURE X VALUE '0'.						CM000020
00694	203	02	FILLER	PICTURE X(26) VALUE 'C						CM000020
00695	204	02	FILLER	PICTURE X(26) VALUE 'TYPE						CM000020
00696	205	02	FILLER	PICTURE X(26) VALUE 'FROM						CM000020
00697	206	02	FILLER	PICTURE X(26) VALUE 'TO						CM000020
00698	207	02	FILLER	PICTURE X(26) VALUE 'EO FOR TEST						CM000020
00699	208	02	FILLER	PICTURE XX VALUE SPACE.						CM000020
00700	2081 01	01	AB8-HD.							CM000020
00701	2082	02	AB88	PICTURE X VALUE 'I						CM000020
00702	2083	02	FILLER	PICTURE X(26) VALUE 'CARD C IOEN. OESCRPTI						CM000020
00703	2084	02	FILLER	PICTURE X(26) VALUE 'ON CODE D						CM000020
00704	2085	02	FILLER	PICTURE X(26) VALUE 'EVICE DEVICE PT OE						CM000020
00705	2086	02	FILLER	PICTURE X(26) VALUE 'VICE DEVICE PT PA						CM000020
00706	2087	02	FILLER	PICTURE X(26) VALUE 'RAMETER CELL						CM000020
00707	2088	02	FILLER	PICTURE XX VALUE SPACE.						CM000020
00708	** 208A 01	01	AB88-HD.							CM000020
00709	2088	02	FILLER	PICTURE X VALUE 'I						CM000020
00710	208C	02	FILLER	PICTURE X(63) VALUE SPACE.						CM000020
00711	208D	02	FILLER	PICTURE X(6) VALUE 'B-FILE						CM000020
00712	208F	02	FILLER	PICTURE X(63) VALUE SPACE.						CM000020
00713	** 09 01	01	88-HD.							CM000020
00714	10	02	88B	PICTURE X VALUE '0						CM000020
00715	12	02	81H	PICTURE X(4).						CM000020
00716	213	02	FILLER	PICTURE XX VALUE SPACE.						CM000020
00717	** 14	02	82H	PICTURE X.						CM000020
00718	215	02	FILLER	PICTURE XX VALUE SPACE.						CM000020
00719	** 16	02	83H	PICTURE X(5).						CM000020
00720	17	02	FILLER	PICTURE X(3) VALUE SPACE.						CM000020
00721	18	02	84H	PICTURE X(24).						CM000020
00722	** 15	02	FILLER	PICTURE X(3) VALUE SPACE.						CM000020
00723	20	02	85H	PICTURE X(4).						CM000020
00724	** 13	02	FILLER	PICTURE X(3) VALUE SPACE.						CM000020
00725	22	02	86H	PICTURE X(9).						CM000020
00726	219	02	FILLER	PICTURE X(3) VALUE SPACE.						CM000020
00727	** 24	02	87H	PICTURE X(7).						CM000020
00728	** 21	02	FILLER	PICTURE X(6) VALUE SPACE.						CM000020
00729	** 01	02	88H	PICTURE X(9).						CM000020
00730	25	02	FILLER	PICTURE X(4) VALUE SPACE.						CM000020
00731	** 03	02	89H	PICTURE X(7).						CM000020
00732	325	02	FILLER	PICTURE X(6) VALUE SPACE.						CM000020
00733	** 05	02	81CH	PICTURE X(9).						CM000020
00734	** 04	02	FILLER	PICTURE X(4) VALUE SPACE.						CM000020
00735	07	02	811H	PICTURE X.						CM000020
00736	408	02	FILLER	PICTURE X(16) VALUE SPACE.						CM000020
00737	** 17	01	AA-HD.							CM000020
00738	118	02	AAA	PICTURE X VALUE '0						CM000020

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00739	119	02	FILLER	PICTURE X(26) VALUE 'TYP. C. TRANSDUCER ... I ...'	CM000020
00740	120	02	FILLER	PICTURE X(5) VALUE 'CABLE'.	
00741	121	02	FILLER	PICTURE X(38) VALUE SPACE.	CM000020
00742	122	02	FILLER	PICTURE X(26) VALUE 'WIRED P.B. SIG. P.B.'	CM000020
00743	123	02	FILLER	PICTURE X(26) VALUE 'P.B. SIG. P.B.'	CM000020
00744	124	02	FILLER	PICTURE X(11) VALUE 'REC. CAB'.	CM000020
00745	132	01	AAA-HD.		CM000020
00746	** 125	02	AAAA	PICTURE X VALUE ' '.	CM000020
00747	126	02	FILLER	PICTURE X(26) VALUE 'NO. C TYPE C'.	CM000020
00748	127	02	FILLER	PICTURE X(26) VALUE 'TYPE SIGNAL ROUTING'.	
00749	128	02	FILLER	PICTURE X(26) VALUE 'S.C.'	
00750	129	02	FILLER	PICTURE X(26) VALUE '0 1 COND 0 1 0 1 C'.	CM000020
00751	130	02	FILLER	PICTURE X(26) VALUE 'OND 0 1 JB ELEC FA'.	CM000020
00752	131	02	FILLER	PICTURE XX VALUE 'B'.	CM000020
00753	133	01	AAAA-HD.		CM000020
00754	134	02	AAAA-H	PICTURE X VALUE '1'.	
00755	135	02	FILLER	PICTURE X(63) VALUE SPACE.	CM000020
00756	136	02	FILLER	PICTURE X(6) VALUE 'A-FILE'.	CM000020
00757	137	02	FILLER	PICTURE X(63) VALUE SPACE.	CM000020
00758	** C1 01	02	BA-HD.		CM000020
00759	011	02	BAA	PICTURE X VALUE '0'.	CM000020
00760		02	A1H	PICTURE X(4).	
00761		02	FILLFR	PICTURE X VALUE SPACE.	
00762	05	02	A18H	PICTURE X.	
00763		02	FILLER	PICTURE XXX VALUE SPACE.	
00764	07	02	A2H	PICTURE X(7).	CM000020
00765		02	FILLER	PICTURE X(6) VALUE SPACE.	
00766	09	02	A3H	PICTURE X.	CM000020
00767		02	FILLER	PICTURE XXX VALUE SPACE.	
00768	11	02	A4H	PICTURE X(5).	CM000020
00769		02	FILLER	PICTURE XX VALUE SPACE.	
00770	13	02	A5H	PICTURE X(5).	CM000020
00771	15	02	A6H	PICTURE X.	CM000020
00772	17	02	A7H	PICTURE X(5).	CM000020
00773	19	02	A9H	PICTURE X(5).	CM000020
00774	21	02	A9H	PICTURE X.	CM000020
00775	23	02	A10H	PICTURE X(5).	CM000020
00776	25	02	A11H	PICTURE X.	CM000020
00777	** 241	02	FILLER	PICTURE X(14) VALUE SPACE.	
00778		02	FILLER	PICTURE XXX VALUE SPACE.	
00779		02	A12H	PICTURE X(4).	
00780		02	FILLER	PICTURE XX VALUE SPACE.	
00781		02	A13H	PICTURE X(4).	
00782		02	FILLER	PICTURE XX VALUE SPACE.	
00783		02	A14H	PICTURE X(4).	
00784		02	FILLER	PICTURE XX VALUE SPACE.	
00785		02	A15H	PICTURE X(4).	
00786		02	FILLER	PICTURE XX VALUE SPACE.	
00787		02	A16H	PICTURE X(4).	
00788		02	FILLER	PICTURE XX VALUE SPACE.	
00789		02	A17H	PICTURE X(4).	
00790		02	FILLFR	PICTURE XX VALUE SPACE.	
00791		02	A18H	PICTURE X(4).	
00792		02	FILLER	PICTURE XX VALUE SPACE.	
00793		02	A19H	PICTURE X(5).	
00794		02	FILLER	PICTURE XX VALUE SPACE.	
00795		02	A20H	PICTURE X(4).	

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00796		02	FILLFR	PICTURE X VALUE SPACE.	
00797		02	AZ1H	PICTURE X(4).	
00798	** 01 01		AC-HD.		CM000020
00799	502	02	ACC	PICTURE X VALUE '0'.	CM000020
00800	503	02	FILLER	PICTURE X(26) VALUE ' TEST T-DUCER	CM000020
00801	504	02	FILLER	PICTURE X(26) VALUE ' B USED FOR	CM000020
00802	505	02	FILLER	PICTURE X(26) VALUE ' B UDC	CM000020
00803	506	02	FILLFR	PICTURE X(26) VALUE ' R POS. RN NEG. R	CM000020
00804	507	02	FILLER	PICTURE X(26) VALUE 'N RE-CAL	CM000020
00805	508	02	FILLER	PICTURE XX VALUE SPACE.	CM000020
00806	509 01		ACC-HD.		CM000020
00807	510	02	ACCC	PICTURE X VALUE ' '.	CM000020
00808	511	02	FILLER	PICTURE X(26) VALUE ' CELL TYPE RANGE	CM000020
00809	512	02	FILLER	PICTURE X(26) VALUE ' UNITS C PARAMETER TR	CM000020
00810	513	02	FILLER	PICTURE X(26) VALUE 'AN MFG. I-NO. C CARD	CM000020
00811	514	02	FILLFR	PICTURE X(26) VALUE ' N EQUIV. EQUIV.	CM000020
00812	515	02	FILLER	PICTURE X(26) VALUE ' UNITS DATE	CM000020
00813	516	02	FILLER	PICTURE XX VALUE SPACE.	CM000020
00814	517 01		ACCC-HD.		CM000020
00815	518	02	CCCC	PICTURE X VALUE '1'.	CM000020
00816	519	02	FILLER	PICTURE X(63) VALUE SPACE.	CM000020
00817	520	02	FILLER	PICTURE X(6) VALUE 'C-FILE'.	CM000020
00818	521	02	FILLER	PICTURE X(63) VALUE SPACE.	CM000020
00819	** 09 01		BC-HD.		CM000020
00820	10	02	9CC	PICTURE X VALUE '0'.	CM000020
00821		02	FILLER	PICTURE XXXX VALUE SPACE.	
00822		02	C1H	PICTURE X.	
00823		02	FILLER	PICTURE XX VALUE SPACE.	
00824	15	02	FILLER	PICTURE X(3) VALUE SPACE.	CM000020
00825	16	02	C3H	PICTURE X(7).	CM000020
00826		02	FILLER	PICTURE XXX VALUE SPACE.	
00827	718	02	C4AH	PICTURE X(7).	CM000020
00828	7181	02	FILLER	PICTURE X VALUE SPACE.	CM000020
00829	7182	02	C48H	PICTURE X(3).	CM000020
00830	7183	02	FILLER	PICTURE XXX VALUE SPACE.	CM000020
00831	7184	02	C4CH	PICTURE X.	CM000020
00832	719	02	FILLER	PICTURE X(3) VALUE SPACE.	CM000020
00833	** 20	02	C5H	PICTURE X(9).	CM000020
00834	21	02	FILLFR	PICTURE X(3) VALUE SPACE.	CM000020
00835	722	02	C6H	PICTURE X(9).	CM000020
00836	723	02	FILLFR	PICTURE XXX VALUE SPACE.	CM000020
00837	7231	02	C7AH	PICTURE X(6).	CM000020
00838	7232	02	FILLER	PICTURE X VALUE SPACE.	CM000020
00839	7233	02	C7BH	PICTURE X.	CM000020
00840	** 25	02	FILLER	PICTURE X(3) VALUE SPACE.	CM000020
00841	** 01	02	C8H	PICTURE X(4).	CM000020
00842	02	02	FILLER	PICTURE X(3) VALUE SPACE.	CM000020
00843	703	02	C98H	PICTURE X.	CM000020
00844	** 04	02	FILLER	PICTURE XX VALUE SPACE.	CM000020
00845	705	02	C10AH	PICTURE X(9).	
00846	7051	02	FILLER	PICTURE X VALUE SPACE.	CM000020
00847	706	02	FILLER	PICTURE X(4) VALUE SPACE.	CM000020
00848	707	02	C11AH	PICTURE X(9).	
00849	7071	02	FILLER	PICTURE X VALUE SPACE.	CM000020
00850	7072	02	C11BH	PICTURE X(3).	CM000020
00851	708	02	FILLER	PICTURE X(5) VALUE SPACE.	CM000020
00852	709	02	C12H	PICTURE X(6).	CM000020

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00853	710	02 FILLER PICTURE XX VALUE SPACE.	CM000020
00854		02 FILLER PICTURE X(8) VALUE SPACE.	
00855	02501	PROCEDURE DIVISION.	
00856		OPEN I-O B-FILE.	
00857		READ B-FILE AT END GO TO I7-END.	
00858		MOVE B11 TO TSTCELL.	
00859		CLOSE B-FILE.	
00860	02502	OPEN INPUT I-FILE.	
00861	025030	OPEN OUTPUT PRT-A PRT-B.	
00862	025040	READ I-FILE AT END GO TO I-ENO.	
00863		MOVE OPT-LISTC TO IFCLIST.	
00864	025050	IF CK-OPTT = '0' GO TO OPT-RERUN.	
00865	025060	GO TO NO-OPTN.	
00866	025070	OPT-RERUN.	
00867	025080	OPEN INPUT NPATCHI NHOOKI.	
00868	025090	ORNL.	
00869	025100	READ NPATCHI AT END GO TO ORAU.	
00870	025110	WRITE PAT-PRT FROM NPATI.	
00871	025120	GO TO ORNL.	
00872	025130	ORAU.	
00873	025140	READ NHOOKI AT ENO GO TO ALLNHO.	
00874	025150	WRITE HK-PRT FROM NOOKI.	
00875	025160	GO TO ORAU.	
00876	025170	ALLNHO.	
00877	025180	CLOSE NPATCHI NHOOKI.	
00878	025190	NO-OPTN.	
00879		MOVE OPT-CALDATE TO O-CALOATE.	
00880		MOVE '9999' TO M-ST1 M-ST2 M-ST3 M-ST4 M-ST5 M-ST6.	
00881	02603	A-OPEN.	CM000019
00882	02604	OPEN INPUT A-FILE.	CM000019
00883	02605	I-READ.	CM000019
00884	** 2606	READ I-FILE AT ENO GO TO I-ENO.	
00885	026060	IREOON.	
00886	** 26061	MOVE I12 TO ITEM-NO.	
00887	02607	A-READ.	CM000019
00888	** 2608	READ A-FILE AT ENO GO TO A-END.	
00889	26081	A-ON. MOVE A-CARD TO A-TEMP.	
00890	2609	IF A1 NOT = I4 GO TO A-READ.	
00891	26091	IF A1BR NOT = SPACE GO TO CONT-ON.	
00892	26092	IF THRU-SW = 0 MOVE I TO A1B.	
00893	26093	CONT-ON. MOVE A1B TO THRU-SW.	
00894	26094	MOVE A-CARD TO ALN (THRU-SW).	
00895	2610	MOVE A1B TO P-CNT. SUBTRACT 1 FROM P-CNT.	
00896	2611	PERFORM LINE-UP THRU LEX UNTIL P-CNT < 1.	
00897	26111	GO TO C-SET-UP.	CM000019
00898	2612	LINE-UP.	
00899	26121	PERFORM A-READ. MOVE A-CARD TO ALN (P-CNT).	
00900	26122	SUBTRACT 1 FROM P-CNT.	
00901	2614	LEX. EXIT.	
00902	2615	C-SET-UP. MOVE A1B TO AL-SUB.	
00903	26151	CLOSE A-FILE.	CM000019
00904	** 26151	MOVE ZERO TO Z-TOT.	
00905	2616	PERFORM CLEAHK THRU HKAEXIT UNTIL Z-TOT > 5. GO TO CLEAPAT.	
00906	2617	CLEAHK. ADD 1 TO Z-TOT. MOVE ZERO TO P15 (Z-TOT).	
00907	26171	MOVE SPACE TO P1 (Z-TOT) P2 (Z-TOT) P3 (Z-TOT) P4 (Z-TOT)	
00908	26172	P5A (Z-TOT) P5B (Z-TOT) P6 (Z-TOT) P7 (Z-TOT)	
00909	** 26172	P8 (Z-TOT) P9 (Z-TOT)	

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00910 26173 P10 (Z-TOT) P11 (Z-TOT) P12 (Z-TOT) P13 (Z-TOT) P14 (Z-TOT)
00911 26174 MOVE ZERO TO P1A (Z-TOT).
00912 2618 HKAEXIT. EXIT.
00913 2619 CLEAPAT. MOVE ZERO TO Z-TOT.
00914 2620 PERFORM BLEAPAT THRU PTREXA UNTIL Z-TOT > 5. GO TO XXA.
00915 2621 BLEAPAT. ADD 1 TO Z-TOT. MOVE ZERO TO QPRTD (Z-TOT).
00916 26211 MOVE ZERO TO QPRTB (Z-TOT).
00917 2622 PTREXA. EXIT.
00918 2623 XXA. MOVE ZERO TO Z-TOT.
00919 2624 PERFORM XXB THRU XXC UNTIL Z-TOT > 95. GO TO C-OPEN.
00920 2625 XXB. ADD 1 TO Z-TOT. MOVE ZERO TO APT5 (Z-TOT).
00921 26252 MOVE SPACE TO APT1 (Z-TOT) APT2 (Z-TOT) APT3 (Z-TOT)
00922 26253 APT4 (Z-TOT).
00923 ** 26251 MOVE ZERO TO APT1A (Z-TOT).
00924 2626 XXC. EXIT.
00925 2701 C-OPEN. OPEN I-O C-FILE.
00926 027021 IF A2 = 'TC/CA'
00927 027022 OR A2 = 'TC/CC'
00928 027023 OR A2 = 'TC/IC'
00929 **027023 OR A2 = 'EVENT-1'
00930 **027023 OR A2 = 'BRK'
00931 **027023 OR A2 = 'WIRE'
00932 **027023 OR A2 = 'CONTCLD'
00933 OR A2 = 'USER'
00934 OR A2 = 'TC/CHCN'
00935 **027023 OR A2 = 'C-SHUNT'
00936 OR A2 = 'TUBE'
00937 027024 OR A2 = 'V-LEADS'
00938 ** 27025 OR A2 = 'SV-LEAD' ADD 1 TO HK-SUB
00939 27026 MOVE 11 TO P1 (HK-SUB)
00940 27027 MOVE 13 TO P2 (HK-SUB)
00941 027027 PERFORM TC-CHK
00942 027028 CLOSE C-FILE MOVE 1 TO CF-SW GO TO ASQ-LK.
00943 **027011 IF 15 = SPACE AND 16 = SPACE NEXT SENTENCE
00944 027022 ELSE GO TO C-READ.
00945 027029 MOVE 0 TO CF-SW.
00946 ** 2702 C-READ. READ C-FILE AT END GO TO C-END.
00947 IF C9 NOT = '0' GO TO C-READ.
00948 27030 IF A2 NOT = C3 GO TO C-READ.
00949 27031 IF C5 NOT = SPACE GO TO C-READ.
00950 027031 IF C12 = SPACE GO TO C-READ1.
00951 027032 IF C12C < 0-CYR GO TO C-READ.
00952 ** 27033 IF C12C > 0-CYR GO TO C-READ1.
00953 27034 IF C12A < 0-CMD GO TO C-READ.
00954 27035 IF C12A > 0-CMD GO TO C-READ1.
00955 27036 IF C12B < 0-CDY GO TO C-READ.
00956 27037 C-READ1.
00957 27038 IF 16A = 'R' GO TO CBRGN.
00958 2704 IF 16A = 'I' GO TO CCSGN. IF 16A NOT = SPACE MOVE 111 TO BEA CM000019.
00959 MOVE 1 TO CF-SW
00960 2705 MOVE 11 TO BEB PERFORM B-WRIT CLOSE C-FILE GO TO R-EXT. CM000019
00961 2706 CCSGN. IF 15 = SPACE GO TO C-TABLE. IF 15 NOT = C6 GO TO C-READ.
00962 2707 GO TO C-TABLE.
00963 2708 CBRGN. IF C5 NOT = SPACE GO TO C-READ. IF 15 = SPACE GO TO CBRGN. CM000019
00964 2709 IF 16RB NOT = C4A OR 16RC NOT = C4B OR 16RD NOT = C4C GO TO CM000019
00965 2710 C-READ. IF 15 NOT = C6 GO TO C-READ. GO TO C-TABLE. CM000019
00966 2711 CBRGN. IF 16RB NOT = C4A OR 16RC NOT = C4B OR 16RD NOT = C4C GO CM000019

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00967 2712 - TO C-READ. GO TO C-TABLE. CM000019
00968 2713 CCGN. IF I6B NOT = C7A GO TO C-READ. IF C5 NOT = SPACE MOVE
00969 2714 11 TO AEA MOVE C5 TO AEB PERFORM A-WRIT GO TO R-EXT.
00970 27141 IF I6E NOT = C7B GO TO C-READ.
00971 2715 GO TO C-TABLE.
00972 027151 TC-CHK.
00973 027152 IF A2 = 'TC/CC' MOVE A2 TO P4 (HK-SUB).
00974 027153 IF A2 = 'TC/IC' MOVE A2 TO P4 (HK-SUB).
00975 027154 IF A2 = 'TC/CA' MOVE A2 TO P4 (HK-SUB).
00976 **027154 IF A2 = 'BRK' MOVE A2 TO P4 (HK-SUB).
00977 **027154 IF A2 = 'WIRE' MOVE A2 TO P4 (HK-SUB).
00978 **027154 IF A2 = 'CONTCLD' MOVE A2 TO P4 (HK-SUB).
00979 **027154 IF A2 = 'C-SHUNT' MOVE A2 TO P4 (HK-SUB).
00980 IF A2 = 'USER' MOVE A2 TO P4 (HK-SUB).
00981 IF A2 = 'TC/CHCN' MOVE A2 TO P4 (HK-SUB).
00982 027155 IF A2 = 'EVENT-1' MOVE 'EVENT' TO P4 (HK-SUB).
00983 ** 2716 A-WRIT. DISPLAY '(-CARD' AEA.
00984 27161 DISPLAY 'INSTR ASSIGNED TO' AEB.
00985 2717 B-WRIT. DISPLAY 'ERROR AT' BEA.
00986 27171 DISPLAY 'ON INPUT' BEB.
00987 2720 C-WRIT. DISPLAY 'INST. N/A IN' CEA.
00988 2721 DISPLAY 'AT' CEB.
00989 27211 EJECT-A. WRITE HK-PRT FROM COUT-PRT AFTER CCC.
00990 27212 WRITE HK-PRT FROM DOUT-PRT AFTER CCD. MOVE 3 TO LN-CTR.
00991 27213 A-FND. MOVE 600 TO BEA. MOVE 11 TO BEB. PERFORM B-WRIT. CM000019
00992 27214 CLOSE A-FILE. GO TO R-EXT.
00993 02801 C-TABLE. CM000019
00994 ** 2810 CNOT-U. ADD 1 TO HK-SUB.
00995 28102 MOVE A21 TO P12 (HK-SUB).
00996 28104 MOVE 1 TO P15 (HK-SUB).
00997 28105 MOVE THRU-SW TO P1A (HK-SUB) CM000019
00998 28106 MOVE THRU-SW TO P16 (HK-SUB) CM000019
00999 2811 MOVE 14 TO P11 (HK-SUB). MOVE 111 TO P13 (HK-SUB).
01000 28111 MOVE ITEM-ND TO P14 (HK-SUB).
01001 2812 MOVE 11 TO P1 (HK-SUB). MOVE 13 TO P2 (HK-SUB).
01002 2813 MOVE C7A TO P4 (HK-SUB). MOVE C1 TO P3 (HK-SUB). CM000019
01003 2814 MOVE C8 TO P7 (HK-SUB). MOVE '1' TO C-SW.
01004 MOVE TSTCELL TO C1.
01005 ** 28011 MOVE 11 TO C5. REWRITE C-CARD.
01006 CLOSE C-FILE.
01007 MOVE 1 TO CF-SW
01008 28141 GO TO ASQ-LK.
01009 2815 C-FND.
01010 28152 DISPLAY 'A-FILE' A-TFMP.
01011 ** 28151 DISPLAY 'C-FILE' C-CARD.
01012 28153 DISPLAY 'I-FILE' I-CARD.
01013 28154 CLOSE C-FILE.
01014 MOVE 1 TO CF-SW
01015 2816 MOVE 201 TO CEB.
01016 02817 MOVE 11 TO CFA. PERFORM C-WRIT. GO TO I-7. CM000019
01017 ** 2901 ASQ-LK. MOVE ALN (THRU-SW) TO SQCK-LN.
01018 IF SQUID-COUNT NOT = 0 GO TO I-7.
01019 02910 SQ-CK. CM000019
01020 ** 2911 IF A135A = 'S' AND A135B NOT = SPACE MOVE A13RB TO CM000019
01021 SQUID-COUNT MOVE THRU-SW TO S-ST1 MOVE 1 TO D-SW1 GO TO I7ZZ.
01022 2912 IF A155A = 'S' AND A155B NOT = SPACE MOVE A15RB TO CM000019
01023 29121 SQUID-COUNT MOVE THRU-SW TO S-ST1 MOVE 1 TO D-SW2 GO TO I7ZZ.

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01024	2914	IF A185A = 'S' AND A185B NOT = SPACE MOVE A18RB TO	CM000019
01025	29141	SQUID-COUNT MOVE THRU-SW TO S-ST1 MOVE 1 TO O-SW4 GO TO I7ZZ.	
01026	29142	GO TO I-7.	
01027	29143	I7ZZ. SUBTRACT 1 FROM SQUID-COUNT.	
01028	030010	I-7.	CM000019
01029	030020	MOVE 0 TO PB-SW1, PB-SW2, STA-SW.	CM000019
01030		MOVE A21 TO P12 (HK-SUB).	
01031		MOVE I4 TO P11 (HK-SUB).	
01032		MOVE I11 TO P13 (HK-SUB).	
01033		MOVE ITEM-NO TO P14 (HK-SUB).	
01034		MOVE 1 TO P15 (HK-SUB)	
01035	030021	MOVE THRU-SW TO P16 (HK-SUB) P1A (HK-SUB)	
01036	030022	MOVE I1 TO P1 (HK-SUB).	
01037	030030	IF I7 = SPACE	CM000019
01038	030040	IF A12 = SPACE	CM000019
01039	030050	IF A4A NOT = 'CB' GO TO CHOSW	
01040	030070	ELSE GO TO I7JA	CM000019
01041	030080	ELSE GO TO I7KA.	CM000019
01042	030090	IF I7C = SPACE	CM000019
01043	030100	IF A12B = SPACE	CM000019
01044	030110	IF A4B = SPACE	CM000019
01045	030120	MOVE I7A TO ST-1	CM000019
01046	030130	GO TO B7-OPEN	CM000019
01047	030140	ELSE MOVE I7AR TO ST-1	CM000019
01048	030150	MOVE A48 TO ST-3	CM000019
01049	030160	ALTER I7AA TO PROCEED TO I7CA	CM000019
01050	** 3017	MOVE 2 TO FLIP-SW	
01051	030180	GO TO B7-OPEN	CM000019
01052	030190	ELSE MOVE I7AR TO ST-1	CM000019
01053	030200	MOVE A12B TO ST-3	CM000019
01054	030210	ALTER I7AA TO PROCEED TO I7CA	CM000019
01055	030220	MOVE 3 TO FLIP-SW	CM000019
01056	030230	GO TO B7-OPEN.	CM000019
01057	030240	IF I7D = SPACE	CM000019
01058	** 30250	IF A12BR = SPACE	
01059	3101	IF A4BR = SPACE	
01060	031020	MOVE I7AR TO ST-1	CM000019
01061	031030	MOVE I7C TO ST-5	CM000019
01062	** 31031	MOVE 2 TO FLIP-SW	
01063	031040	ALTER I7AA TO PROCEED TO I7FA	CM000019
01064	031050	GO TO B7-OPEN	CM000019
01065	031060	ELSE MOVE I7AR TO ST-1	CM000019
01066	031070	MOVE I7C TO ST-5	CM000019
01067	** 3108	MOVE A4BR TO ST-6	
01068	031090	ALTER I7AA TO PROCEED TO I7EA	CM000019
01069	031100	MOVE 2 TO FLIP-SW	CM000019
01070	031110	GO TO B7-OPEN	CM000019
01071	031120	ELSE MOVE I7AR TO ST-1	CM000019
01072	031130	MOVE I7C TO ST-5	CM000019
01073	** 3114	MOVE A12BR TO ST-6	
01074	031150	MOVE 2 TO FLIP-SW	CM000019
01075	031160	ALTER I7AA TO PROCEED TO I7EA	CM000019
01076	031170	GO TO B7-OPEN.	CM000019
01077	031180	IF I7E = SPACE	CM000019
01078	031190	MOVE I7AR TO ST-1	CM000019
01079	031200	MOVE I7BR TO ST-3	CM000019
01080	031210	ALTER I7AA TO PROCEED TO I7CA	CM000019

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01081	031220	MOVE 3 TO FLIP-SW	CM000019
01082	031230	GO TO B7-OPEN.	CM000019
01083	031240	MOVE I7 TO ST-7	CM000019
01084	031250	ALTER I7AA TO PROCEED TO I7GA	CM000019
01085	032010	MOVE 2 TO FLIP-SW	CM000019
01086	032020	GO TO B7-OPEN.	CM000019
01087	032021	CHOSW.	
01088	032022	IF O-SW1 = 1 OR O-SW2 = 1 OR O-SW4 = 1	
01089	032023	IF SQUID-COUNT = 0 MOVE 1 TO I7-SWT	
01090	032024	ELSE GO TO I-8	
01091	**032023	ELSE MOVE 1 TO I7-SWT GO TO I-8.	
01092	** 32024	GO TO I-8.	
01093	032030	I7JA.	CM000019
01094	032040	IF A4B = SPACE	CM000019
01095	032050	MOVE A4A TO ST-1 MOVE 2 TO FLIP-SW	CM000019
01096	032060	GO TO B7-OPEN.	CM000019
01097	032070	MOVE A4 TO ST-2 MOVE 2 TO FLIP-SW	CM000019
01098	032080	ALTER I7AA TO PROCEED TO I7BA	CM000019
01099	032090	GO TO B7-OPEN.	CM000019
01100	032100	I7KA.	CM000019
01101	032110	IF A12B = SPACE	CM000019
01102	032120	MOVE A12A TO ST-1	CM000019
01103	032130	MOVE 2 TO FLIP-SW	CM000019
01104	032140	GO TO B7-OPEN.	CM000019
01105	032150	MOVE A12 TO ST-2	CM000019
01106	032160	ALTER I7AA TO PROCEED TO I7BA	CM000019
01107	032170	MOVE 1 TO FLIP-SW	CM000019
01108	032180	GO TO B7-OPEN.	CM000019
01109	032190	I7GA.	CM000019
01110	032200	IF ST-7 = B3	CM000019
01111	032220	GO TO BTAB-LK.	CM000019
01112	032230	GO TO B7-RD.	CM000019
01113	032240	I7FA.	CM000019
01114	032250	IF ST-1 = B5A	CM000019
01115	033010	IF ST-5 = B5BRR	CM000019
01116	033030	GO TO BTAB-LK.	CM000019
01117	033040	GO TO B7-RD.	CM000019
01118	033050	I7EA.	CM000019
01119	033060	IF ST-1 = B5A	CM000019
01120	033070	IF ST-5 = B5BRR	CM000019
01121	033080	IF ST-6 = B5CRR	CM000019
01122	033100	GO TO BTAB-LK.	CM000019
01123	033110	GO TO B7-RD.	CM000019
01124	033120	I7OA.	CM000019
01125	033130	IF ST-1 = B3RA	CM000019
01126	033140	IF ST-3 = B3RB	CM000019
01127	033160	GO TO BTAB-LK.	CM000019
01128	033170	GO TO B7-RD.	CM000019
01129	033180	I7CA.	CM000019
01130	033190	IF ST-1 = B5A	CM000019
01131	033200	IF ST-3 = B5B	CM000019
01132	033220	GO TO BTAB-LK.	CM000019
01133	033230	GO TO B7-RD.	CM000019
01134	033240	I7BA.	CM000019
01135	033250	IF ST-2 = B5	CM000019
01136	034020	GO TO BTAB-LK.	CM000019
01137	034030	GO TO B7-RD.	CM000019

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01138	034040	B7-OPEN.	CM000019
01139	** 3405	OPEN I-O B-FILE.	
01140	034060	B7-RO.	CM000019
01141	034070	REAO B-FILE AT END GO TO I7-END.	CM000019
01142	** 34071	IF B10 NOT = SPACE GO TO B7-RO.	
01143	034080	I7AA.	CM000019
01144	034090	GO TO I7HA.	CM000019
01145	034100	I7HA.	CM000019
01146	034110	IF ST-1 = B5A	CM000019
01147	034130	GO TO BTAB-LK.	CM000019
01148	034140	GO TO B7-RO.	CM000019
01149	034150	BTAB-LK.	CM000019
01150	034160	PERFORM B-TABLE.	CM000019
01151	034170	CHK-I7B9.	CM000019
01152	034180	IF STA-SW = 1 GO TO PB-SET.	CM000019
01153	034190	IF STA-SW = 2 GO TO EPB-SET.	CM000019
01154	034200	IF STA-SW = 3 GO TO KPB-SET.	CM000019
01155	034210	IF B6B = 'PB1' OR B6B = 'PB2'	CM000019
01156	034220	MOVE B6B TO B-ST	CM000019
01157	034230	MOVE 1 TO PB-SW1.	CM000019
01158	034240	IF B9B = 'PB1' OR B9B = 'PB2'	CM000019
01159	034250	MOVE B9B TO B-ST	CM000019
01160	035010	MOVE 1 TO PB-SW2.	
01161	035020	IF PB-SW1 = 1	CM000019
01162	035040	MOVE 71 TO CEB MOVE 11 TO CEA PERFORM C-WRIT GO TO B7-RO.	CM000019
01163	035080	IF PB-SW2 NOT = 1 GO TO HK-I7B9.	
01164	035090	AOD 1 TO APT-SUB	CM000019
01165	035100	MOVE B-ST TO APT2 (APT-SUB)	CM000019
01166	035110	MOVE B9 TO APT3 (APT-SUB)	CM000019
01167	035120	PERFORM PAT-M.	CM000019
01168	**035013	IF THRU-SW NOT = S-ST1 GO TO HK-I7B9.	
01169	** 35014	IF O-SW1 = 1	
01170	035015	MOVE B-ST TO S-ST2 MOVE 2 TO APT5 (APT-SUB).	
01171	035016	HK-I7B9.	
01172	035017	IF B3RRB = '0' OR '1' OR '2' OR '3' OR '4' OR '5' OR '6'	
01173	035018	OR '7' OR '8' OR '9' GO TO PAHK-I7B9.	
01174	035019	IF M-SW1 = 0 MOVE 1 TO M-SW1 MOVE B3 TO M-1ST.	
01175	035020	PAHK-I7B9.	
01176	** 3513	IF B5A NOT = 'CB' MOVE B3 TO P6 (HK-SUB).	CM000019
01177	035140	MOVE B6 TO P5A (HK-SUB)	CM000019
01178	035150	MOVE B7 TO P5B (HK-SUB)	CM000019
01179	**035060	IF BSW-1 = 1 PERFORM B-UPDATE	CM000019
01180	03507	ELSE GO TO B7-RO.	
01181	035160	CLOSE B-FILE	CM000019
01182	035170	GO TO I-8.	CM000019
01183	035180	SQUID-ROUTINE.	CM000019
01184	035190	AOD 1 TO SQ-SUB.	CM000019
01185	035200	MOVE 'SQUID' TO QPRTC (SQ-SUB).	CM000019
01186	035210	MOVE THRU-SW TO QPRTB (SQ-SUB).	CM000019
01187	035220	MOVE 1 TO QPRTD (SQ-SUB).	CM000019
01188	035221	MOVE ITEM-NO TO QPRTA (SQ-SUB).	
01189	035230	PAT-M.	CM000019
01190	035240	MOVE ITEM-NO TO APT1 (APT-SUB)	CM000019
01191	035250	MOVE THRU-SW TO APT1A (APT-SUB)	CM000019
01192	35A010	MOVE 1 TO APT5 (APT-SUB).	CM000019
01193	35A020	B-UPDATE.	CM000019
01194		IF B1 = SPACE MOVE 'XXXX' TO B1.	

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01195 35A030 MOVE I1 TO B1Q. REWRITE B-CARD.
01196 35A080 BT-UPOATE. CM000019
01197 IF BT1 = SPACE MOVE 'XXXX' TO BT1.
01198 35A090 CLOSE B-FILE. OPEN I-D B-FILE.
01199 35A091 PERFORM BT-UPOATT THRU BT-UPOATTT.
01200 35A092 BT-UPOATT.
01201 35A093 READ B-FILE AT END GO TO BT-UPOATTT.
01202 35A094 IF BT1 = B1 IF BT2 = B2 MOVE I1 TO B1Q REWRITE B-CARD
01203 GO TO BT-UPOATTT.
01204 35A095 GO TO BT-UPOATT.
01205 35A096 BT-UPOATTT. EXIT.
01206 ** 3601 I7-END. CLOSE B-FILE.
01207 3602 IF FLIP-SW = 1 GO TO I-8.
01208 36021 IF FLIP-SW = 2 DISPLAY 'A-FILE ' A-TEMP
01209 36022 DISPLAY 'I-FILE ' I-CARD
01210 36023 DISPLAY 'I-7 NOT = B3' GO TO I-8.
01211 3604 IF FLIP-SW = 3 ALTER I7AA TO PROCEED TO I70A MOVE 2 TO
01212 3605 FLIP-SW GO TO B7-OPEN.
01213 3606 IF FLIP-SW = 10 GO TO I-8B.
01214 3607 IF FLIP-SW = 12 GO TO I-8C.
01215 3608 IF FLIP-SW = 13 GO TO I-9.
01216 3609 IF FLIP-SW = 14 GO TO I-10.
01217 3610 IF FLIP-SW = 15 GO TO I10BB.
01218 3611 IF FLIP-SW = 16 GO TO STA-CK.
01219 3612 IF FLIP-SW = 17 GO TO I10BA.
01220 3613 IF FLIP-SW = 18 GO TO STA-CK.
01221 3614 IF FLIP-SW = 19 GO TO I9AC.
01222 3615 IF FLIP-SW = 20 GO TO I9FC.
01223 3616 IF FLIP-SW = 28 ALTER I7AA TO PROCEED TO I70A MOVE 27 TO
01224 3617 FLIP-SW GO TO B7-OPEN.
01225 IF FLIP-SW = 27
01226 DISPLAY 'A-FILE ' A-TEMP
01227 DISPLAY 'I-FILE ' I-CARD
01228 DISPLAY 'I-10 NOT EQUAL A-20'
01229 GO TO STA-CK.
01230 IF FLIP-SW = 37
01231 DISPLAY 'A-FILE ' A-TEMP
01232 DISPLAY 'I-FILE ' I-CARD
01233 DISPLAY 'I-8 NOT = A14'
01234 GO TO I-9.
01235 3620 IF FLIP-SW = 38 ALTER I7AA TO PROCEED TO I70A MOVE 37 TO
01236 3621 FLIP-SW GO TO B7-OPEN.
01237 IF FLIP-SW = 47
01238 DISPLAY 'A-FILE ' A-TEMP
01239 DISPLAY 'I-FILE ' I-CARD
01240 DISPLAY 'I-9 NOT = A17'
01241 GO TO I-10.
01242 3623 IF FLIP-SW = 48 ALTER I7AA TO PROCEED TO I70A MOVE 47 TO
01243 3624 FLIP-SW GO TO B7-OPEN.
01244 036250 IF FLIP-SW = 77 DISPLAY '36250 ' I-CARD GO TO CHK-I789.
01245 038010 I-8. CM000019
01246 MOVE A21 TO P12 (HK-SUB).
01247 MOVE I4 TO P11 (HK-SUB).
01248 MOVE I11 TO P13 (HK-SUB).
01249 MOVE ITEM-ND TO P14 (HK-SUB).
01250 038020 MOVE 1 TO STA-SW. ALTER I7AA TO PROCEED TO I7HA. CM000019
01251 038030 IF I8 = SPACE GO TO A-14. IF I8C = SPACE GO TO I8KA. CM000019

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01252	038040	IF 18D = SPACE GO TO 18KB. IF 18E = SPACE GO TO 18KC.	CM000019
01253	** 38041	MOVE 37 TO FLIP-SW.	
01254	038050	MOVE 18 TO ST-7. ALTER 17AA TO PROCEED TO 17GA.	CM000019
01255	038060	GO TO 87-OPEN.	CM000019
01256	038070	A-14. IF A14 = SPACE GO TO 1-9.	CM000019
01257	038080	IF A14B = SPACE GO TO 18KD. MOVE A14 TO ST-2.	CM000019
01258	038090	ALTER 17AA TO PROCEED TO 17BA. MOVE 37 TO FLIP-SW.	CM000019
01259	038100	GO TO 87-OPEN.	CM000019
01260	038110	18KD. MOVE A14A TO ST-1. MOVE 37 TO FLIP-SW. GO TO 87-OPEN.	CM000019
01261	038120	18KA. IF A14B = SPACE GO TO 18KE.	CM000019
01262	038130	MOVE 18AR TO ST-1. MOVE A14B TO ST-3. ALTER 17AA TO	CM000019
01263	038140	PROCEED TO 17CA. MOVE 37 TO FLIP-SW. GO TO 87-OPEN.	CM000019
01264	038150	18KE. MOVE 18A TO ST-1. MOVE 37 TO FLIP-SW. GO TO 87-OPEN.	CM000019
01265	** 3816	18KB. IF A148R = SPACE GO TO 18KF.	
01266	3817	MOVE 18AR TO ST-1. MOVE 18C TO ST-5.	
01267	38171	MOVE A148R TO ST-6.	
01268	3818	MOVE 37 TO FLIP-SW. ALTER 17AA TO PROCEED TO 17EA.	
01269	38181	GO TO 87-OPEN.	
01270	038190	18KF. MOVE 18AR TO ST-1. MOVE 18C TO ST-5. ALTER 17AA TO PROCEED	CM000019
01271	** 3820	TO 17FA. MOVE 37 TO FLIP-SW. GO TO 87-OPEN.	
01272	038210	18KC. MOVE 18AR TO ST-1. MOVE 18B TO ST-3. ALTER 17AA TO	CM000019
01273	038220	PROCEED TO 17CA. MOVE 38 TO FLIP-SW.	CM000019
01274	038230	GO TO 87-OPEN.	
01275	039010	PB-SET. IF BSW-1 NOT = 1 GO TO 87-RD.	CM000019
01276	039020	IF PB-SW2 = 1 GO TO APB-SET.	CM000019
01277	039030	IF O-SW1 = 1 GO TO S-SET.	CM000019
01278	** 3904	S2-SET. IF B88 = 'PB1' GO TO 18ZV.	CM000019
01279	39041	IF B88 NOT = 'PB2' GO TO 1-8E.	CM000019
01280	39042	18ZV.	CM000019
01281	039050	MOVE 1 TO PB-SW2. MOVE B88 TO B-ST. ADD 1 TO APT-SUB.	CM000019
01282	039060	PERFORM PAT-4. MOVE B9 TO APT3 (APT-SUB).	CM000019
01283	039070	MOVE B8 TO APT2 (APT-SUB). MOVE B3 TO PB (HK-SUB).	CM000019
01284	039080	GO TO 1-8E.	CM000019
01285	039090	APB-SET. GO TO 8PB-SET.	CM000019
01286	039100	8PB-SET. IF B68 NOT = B-ST MOVE 12 TO FLIP-SW. GO TO 87-RD.	CM000019
01287	039110	S1-SET. IF O-SW1 = 1 GO TO 18TA. MOVE B7 TO APT4 (APT-SUB).	CM000019
01288	039120	GO TO 18TB.	CM000019
01289	039130	18TA. IF THRU-SW = S-ST1 MOVE B-ST TO S-ST2. MOVE 2 TO	CM000019
01290	039140	APT5 (APT-SUB).	CM000019
01291	** 3915	IF A13A NOT = SPACE OR A13B = SPACE MOVE B7 TO	
01292	39151	APT4 (APT-SUB)	
01293	39152	MOVE B6 TO APT2 (APT-SUB)	
01294	039160	GO TO 18TB.	CM000019
01295	039170	PERFORM SQUID-ROUTINE. MOVE B7 TO QPRTE (SQ-SUB).	CM000019
01296	039180	MOVE 1 TO SCA-SW. MOVE B6 TO QPRTE (SQ-SUB).	CM000019
01297	039190	18TB. IF B88 = 'PB1' OR B88 = 'PB2' ADD 1 TO APT-SUB	CM000019
01298	** 39191	MOVE 1 TO P15 (HK-SUB)	CM000019
01299	039200	PERFORM PAT-M. MOVE B8 TO APT2 (APT-SUB). MOVE B9 TO	CM000019
01300	039210	APT3 (APT-SUB). MOVE 1 TO PB-SW2. MOVE B88 TO B-ST.	CM000019
01301	** 3922	1-8E. MOVE B3 TO PB (HK-SUB). MOVE 1 TO P15 (HK-SUB).	CM000019
01302	3923	IF B3RRB = '0' OR '1' OR '2' OR '3' OR '4' OR '5' OR '6'	
01303	39231	OR '7' OR '8' OR '9' GO TO MI-8E.	
01304	3924	IF M-SW2 = 0	CM000019
01305	3925	MOVE 1 TO M-SW2	CM000019
01306	3926	MOVE B3 TO M-2ST	
01307	3927	GO TO MI-8E.	CM000019
01308	3928	IF B3RRA = M-ST2 GO TO MI-8E.	CM000019

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01309	3929	MOVE B3 TO M-3ST.	
01310	3930	MI-BE.	CM000019
01311	4001	PERFORM B-UPDATE CLOSE B-FILE GO TO I-9.	CM000019
01312	040020	I-8C. IF B-ST = 'PB1' MOVE 'PB2' TO R-ST GO TO I8TC.	CM000019
01313	040030	IF B-ST = 'PB2' MOVE 'PB1' TO R-ST.	CM000019
01314	040040	I8TC. ALTER APB-SET TO PROCEED TO OPB-SET.	CM000019
01315	040050	MOVE 13 TO FLIP-SW. GO TO B7-OPEN.	CM000019
01316	040060	OPB-SET.	CM000019
01317	040070	IF B6B NOT = R-ST GO TO B7-RO. MOVE B-CARD TO B-TEMP.	CM000019
01318	** 40080	CLOSE B-FILE. OPEN I-O B-FILE. MOVE 13 TO FLIP-SW.	
01319	040090	BJ-READ. READ B-FILE AT END GO TO I8-END.	CM000019
01320	040100	IF B5 NOT = 'INTR' GO TO BJ-READ.	CM000019
01321	040110	IF B10 NOT = SPACE GO TO BJ-READ.	CM000019
01322	040120	PERFORM B-TABLE. IF BSW-1 = 1 GO TO I8-J. GO TO BJ-READ.	CM000019
01323	040130	I8-END. CLOSE B-FILE. MOVE 801 TO CEB MOVE I1 TO CEA	CM000019
01324	040140	PERFORM C-WRIT GO TO I-9.	CM000019
01325	** 4015	S-SET. IF THRU-SW > S-ST1 GO TO S2-SET.	
01326	040160	IF SQUID-COUNT = 0 GO TO S2-SET.	
01327	** 4017	GJMP. GO TO IJMP.	
01328	4018	IJMP. IF B6B = S-ST2 GO TO S1-SET. MOVE 10 TO FLIP-SW.	
01329	040190	GO TO B7-RO.	CM000019
01330	** 4020	I-8B. ALTER GJMP TO PROCEED TO HJMP MOVE 13 TO FLIP-SW.	
01331	040210	GJ TO B7-OPEN.	CM000019
01332	40A010	I8-J. IF B6B NOT = B-ST GO TO I8TO.	
01333	40A020	S3-SET. IF O-SW1 NOT = 1 GO TO I8TE.	CM000019
01334	40A030	IF THRU-SW = S-ST1 MOVE B-ST TO S-ST2 MOVE 2 TO	CM000019
01335	40A040	APT5 (APT-SUB).	CM000019
01336	40A050	IF A13A NOT = SPACE GO TO I8TE.	CM000019
01337	40A060	IF A13B = SPACE GO TO I8TE. PERFORM SQUID-ROUTINE.	CM000019
01338	40A061	MOVE B6 TO QPRTF (SQ-SUB)	
01339	40A070	MOVE B7 TO QPRTF (SQ-SUB) MOVE 1 TO SCA-SW GO TO I8TF.	CM000019
01340	40A080	I8TE. MOVE B7 TO APT4 (APT-SUB).	CM000019
01341	40A090	I8TF. ADD 1 TO APT-SUB. PERFORM PAT-M. MOVE B8 TO APT2 (APT-SUB)	CM000019
01342	40A100	MOVE B9 TO APT3 (APT-SUB). MOVE B8B TO B-ST.	CM000019
01343	40A110	I8TG. PERFORM B-UPDATE.	CM000019
01344	40A120	IF BT6B NOT = B-ST MOVE B02 TO CEB MOVE I1 TO CEA PERFORM	CM000019
01345	** 40A13	C-WRIT GO TO I8TH.	
01346	40A140	MOVE B7 TO APT4 (APT-SUB).	CM000019
01347	40A150	IF BT8B = 'PB1' OR BT8B = 'PB2' ADD 1 TO APT-SUB MOVE BTB	CM000019
01348	40A160	TO APT2 (APT-SUB) PERFORM PAT-M MOVE BT9 TO APT3 (APT-SUB)	CM000019
01349	40A170	MOVE 1 TO PB-SW2 MOVE BT8B TO B-ST.	CM000019
01350	40A171	I8TH.	CM000019
01351	40A172	IF B3TRRB = '0' OR '1' OR '2' OR '3' OR '4' OR '5' OR '6'	
01352	** 40A172	OR '7' OR '8' OR '9' GO TO I8TH.	
01353	40A173	IF M-SW2 = 0 MOVE 1 TO M-SW2	
01354	40A174	MOVE BT3 TO M-2ST	
01355	40A175	GO TO I8TH.	CM000019
01356	40A176	IF B3TRRA = M-ST2 GO TO I8TH.	CM000019
01357	40A177	MOVE BT3 TO M-3ST.	
01358	40A178	I8TH.	CM000019
01359	40A179	PERFORM BT-UPDATE MOVE BT3 TO P8 (HK-SUB) CLOSE B-FILE.	CM000019
01360	40A181	GO TO I-9.	
01361	40A190	I8TO. IF B8B NOT = B-ST GO TO BJ-READ.	CM000019
01362	40A191	S4-SET.	
01363	40A200	IF O-SW1 NOT = 1 GO TO I8TI.	CM000019
01364	40A210	IF THRU-SW = S-ST1 MOVE B-ST TO S-ST2 MOVE 2 TO	CM000019
01365	40A220	APT5 (APT-SUB).	CM000019

01366	40A230	IF A13A NOT = SPACE OR A13B = SPACE GO TO 18T1.	CM000019
01367	40A240	PERFORM SQUIO-ROUTINE. MOVE B9 TO QPRTE (SQ-SUB) MOVE 1 TO	CM000019
01368	40A250	SCA-SW MOVE B8 TO QPRTE (SQ-SUB).	
01369	40A251	GO TO 18TJ.	
01370	40B010	18T1. MOVE B9 TO APT4 (APT-SUB).	CM000019
01371	40B020	18TJ. ADD 1 TO APT-SUB. PERFORM PAT-M. MOVE B6 TO APT2 (APT-SUB)	CM000019
01372	40B030	MOVE B7 TO APT3 (APT-SUB). MOVE B6B TO B-ST. GO TO 18TG.	CM000019
01373	40B040	HJMP. IF B6B NOT = S-ST3 GO TO B7-RD.	CM000019
01374	40B050	MOVE B-CARD TO B-TEMP. CLOSE B-FILE.	CM000019
01375	**40B050	OPEN I-O B-FILE.	
01376	40B060	MOVE 12 TO FLIP-SW.	CM000019
01377	40B070	BH-READ. READ B-FILE AT END GO TO 18-END.	CM000019
01378	40B080	IF B5 NOT = 'INTR' GO TO BH-READ.	CM000019
01379	40B090	IF B10 NOT = SPACE GO TO BH-READ.	CM000019
01380	40B100	IF B6B NOT = S-ST2 GO TO 18TK.	CM000019
01381	40B110	PERFORM B-TABLE. IF BSW-1 NOT = 1 GO TO BH-READ. GO TO	CM000019
01382	40B120	S3-SET.	CM000019
01383	40B130	18TK. IF B8B NOT = S-ST2 GO TO BH-READ. PERFORM B-TABLE.	CM000019
01384	40B140	IF BSW-1 NOT = 1 GO TO BH-READ. GO TO S4-SET.	CM000019
01385	**041010	I-9.	CM000019
01386		MOVE A21 TO P12 (HK-SUB).	
01387		MOVE 14 TO P11 (HK-SUB).	
01388		MOVE 111 TO P13 (HK-SUB).	
01389		MOVE ITEM-NO TO P14 (HK-SUB).	
01390	041020	MOVE 2 TO STA-SW ALTER 17AA TO PROCEED TO 17HA.	CM000019
01391	041030	IF I9 = SPACE GO TO A-17. IF I9C = SPACE GO TO 19KA.	CM000019
01392	041040	IF I90 = SPACE GO TO 19KB. IF I9E = SPACE GO TO 19KC.	CM000019
01393	041050	MOVE 19 TO ST-7. ALTER 17AA TO PROCEED TO 17GA.	CM000019
01394	** 41051	MOVE 47 TO FLIP-SW.	
01395	041060	GO TO B7-OPEN.	CM000019
01396	041070	A-17. IF A17 = SPACE GO TO I-10.	CM000019
01397	041080	IF A17B = SPACE GO TO 19KO. MOVE A17 TO ST-2.	CM000019
01398	041090	ALTER 17AA TO PROCEED TO 17BA. MOVE 47 TO FLIP-SW.	CM000019
01399	041100	GO TO B7-OPEN.	CM000019
01400	041110	19KO. MOVE A17A TO ST-1. MOVE 47 TO FLIP-SW. GO TO B7-OPEN.	CM000019
01401	041120	19KA. IF A17B = SPACE GO TO 19KE.	CM000019
01402	041130	MOVE 19AR TO ST-1. MOVE A17B TO ST-3. ALTER 17AA TO	CM000019
01403	041140	PROCEED TO 17CA. MOVE 47 TO FLIP-SW. GO TO B7-OPEN.	CM000019
01404	041150	19KE. MOVE 19A TO ST-1. MOVE 47 TO FLIP-SW. GO TO B7-OPEN.	CM000019
01405	** 4116	19KB. IF A17BR = SPACE GO TO 19KF.	
01406	4117	MOVE 19AR TO ST-1. MOVE 19C TO ST-5. MOVE A17BR TO ST-6.	
01407	041180	MOVE 47 TO FLIP-SW. ALTER 17AA TO PROCEED TO 17EA.	CM000019
01408	041190	GO TO B7-OPEN.	CM000019
01409	** 4120	19KF. MOVE 19AR TO ST-1. MOVE 19C TO ST-5. ALTER 17AA TO	
01410	4121	PROCEED TO 17FA MOVE 47 TO FLIP-SW GO TO B7-OPEN.	
01411	4122	19KC. MOVE 19AR TO ST-1. MOVE 19BR TO ST-3. ALTER 17AA TO	
01412	041230	PROCEED TO 17CA. MOVE 48 TO FLIP-SW.	CM000019
01413	041240	GO TO B7-OPEN.	
01414	042010	EPB-SET. IF BSW-2 = 1 GO TO B7-RD.	CM000019
01415	042020	IF PB-SW2 NOT = 1 GO TO 19TA.	CM000019
01416	042030	19BD. GO TO 19BE.	CM000019
01417	** 4204	19BE. IF B6B NOT = B-ST MOVE 19 TO FLIP-SW GO TO B7-RD.	
01418	042050	S19-SET. IF O-SW1 = 1 GO TO 19TB. IF O-SW2 NOT = 1 GO TO 19TC.	CM000019
01419	042060	IF THRU-SW NOT = S-ST1 GO TO 19TB.	CM000019
01420	042070	MOVE B-ST TO S-ST2. MOVE 2 TO APT5 (APT-SUB).	CM000019
01421	042080	19TB. IF A13A NOT = SPACE OR A15A NOT = SPACE OR A16B = SPACE	CM000019
01422	042090	GO TO 19TC. PERFORM SQUIO-ROUTINE. MOVE B7 TO QPRTE (SQ-SUB)	CM000019

01423	042091	MOVE B6 TO QPRTF (SQ-SUB)	
01424	042100	MOVE 1 TO SCA-SW. GO TO I9TD	CM000019
01425	042110	I9TG. MOVE B7 TO APT4 (APT-SUB)	CM000019
01426	042120	I9TD. IF B8B = 'PB1' OR B8B = 'PB2' ADD 1 TO APT-SUB MOVE B8 TO	CM000019
01427	042130	APT2 (APT-SUB) MOVE B9 TO APT3 (APT-SUB) PERFORM PAT-M	CM000019
01428	042140	MOVE 1 TO PB-SW2 MOVE B8B TO B-ST.	CM000019
01429	042141	I9TE.	CM000019
01430	** 42142	MOVE 1 TO P15 (HK-SUB)	CM000019
01431	42143	IF B3RRB = '0' OR '1' OR '2' OR '3' OR '4' OR '5' OR '6'	
01432	** 42143	OR '7' OR '8' OR '9' GO TO MI9TE.	
01433	42144	IF M-SW3 = 0	CM000019
01434	42145	MOVE 1 TO M-SW3	CM000019
01435	42146	MOVE B3 TO M-4ST	
01436	42147	GO TO MI9TE.	CM000019
01437	42148	IF B3RRA = M-ST4 GO TO MI9TE.	CM000019
01438	42149	MOVE B3 TO M-5ST.	
01439	** 42149	MI9TE.	CM000019
01440	042150	MOVE B3 TO P9 (HK-SUB) PERFORM B-UPDATE CLOSE B-FILE	CM000019
01441	042160	GO TO I-10.	CM000019
01442	042170	I9-ENO. CLOSE B-FILE MOVE 101 TO CEB MOVE 11 TO CEA PERFORM	CM000019
01443	042180	C-WRIT GO TO I-10.	CM000019
01444	042190	I9TA. IF O-SW1 = 1 OR O-SW2 = 1 GO TO S19-SET.	CM000019
01445	** 42191	S29-SET.	
01446	4220	IF B8B = 'PB1' GO TO I9ZR.	CM000019
01447	42201	IF B8B NOT = 'PB2' GO TO I9TE.	CM000019
01448	4221	I9ZR.	CM000019
01449	42211	MOVE 1 TO PB-SW2.	CM000019
01450	042220	MOVE B8B TO B-ST. ADD 1 TO APT-SUB PERFORM PAT-M	CM000019
01451	042230	MOVE B8 TO APT2 (APT-SUB) MOVE B9 TO APT3 (APT-SUB)	CM000019
01452	042240	GO TO I9TE.	CM000019
01453	043010	S19-SET. IF THRU-SW > S-ST1 GO TO S29-SET.	
01454	043020	IF SQUID-COUNT = 0 GO TO S29-SET.	
01455	043030	I9GC. GO TO I9HC.	CM000019
01456	** 4304	I9HC. IF B6R = S-ST2 GO TO S19-SET.	
01457	4305	MOVE 20 TO FLIP-SW GO TO B7-RD.	
01458	043060	I9FC. IF S-ST2 = 'PB1' MOVE 'PB2' TO S-ST3 GO TO I9TF.	CM000019
01459	043070	IF S-ST2 = 'PB2' MOVE 'PB1' TO S-ST3.	CM000019
01460	043080	I9TF. MOVE 14 TO FLIP-SW ALTER I9GC TO PROCEED TO I9JC GO TO	CM000019
01461	043090	B7-OPEN.	CM000019
01462	043100	I9JC. IF B6B NOT = S-ST3 GO TO B7-RD. MOVE B-CARD TO B-TEMP.	CM000019
01463	043110	CLOSE B-FILE. OPEN I-O B-FILE. MOVE 1 TO FLIP-SW.	
01464	043120	BV-READ. READ B-FILE AT ENO GO TO I9-ENO.	CM000019
01465	043130	IF B5 NOT = 'INTR' GO TO BV-READ.	CM000019
01466	043140	IF B10 NOT = SPACE GO TO BV-READ. PERFORM B-TABLE.	CM000019
01467	** 4316	I9VC. IF B6B = S-ST2 GO TO S39-SET.	
01468	043170	IF B8B = S-ST2 GO TO S49-SET. GO TO BV-READ.	CM000019
01469	043180	I9AC. IF B-ST = 'PB1' MOVE 'PB2' TO R-ST GO TO I9TG.	CM000019
01470	043190	IF B-ST = 'PB2' MOVE 'PB1' TO R-ST.	CM000019
01471	043200	I9TG. MOVE 14 TO FLIP-SW. ALTER I9BD TO PROCEED TO I9DC.	CM000019
01472	043210	GO TO B7-OPEN.	CM000019
01473	043220	I9DC. IF B6B NOT = R-ST GO TO B7-RD. MOVE B-CARD TO B-TEMP.	CM000019
01474	043230	CLOSE B-FILE. OPEN I-O B-FILE.	
01475	43A010	MOVE 2 TO FLIP-SW.	CM000019
01476	43A020	BT-READ. READ B-FILE AT ENO GO TO I9-ENO.	CM000019
01477	43A030	IF B5 NOT = 'INTR' GO TO BT-READ.	CM000019
01478	43A040	IF B10 NOT = SPACE GO TO BT-READ. PERFORM B-TABLE.	CM000019
01479	43A060	I9EC. IF B6B = B-ST GO TO S39-SET.	CM000019

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01480 43A070 IF B8B NOT = B-ST GO TO BT-READ. CM000019
01481 43A080 S49-SET. IF O-SW1 = 1 GO TO I9TH. IF O-SW2 NOT = 1 GO TO I9TH. CM000019
01482 43A090 IF THRU-SW = S-ST1 MOVE B-ST TO S-ST2 MOVE 2 TO CM000019
01483 43A100 APT5 (APT-SUB). CM000019
01484 43A110 I9TH. IF A13A NOT = SPACE OR A15A NOT = SPACE GO TO I9TI. CM000019
01485 43A120 IF A16B = SPACE GO TO I9TI. PERFORM SQUID-ROUTINE. CM000019
01486 43A130 MOVE B8 TO QPRTE (SQ-SUB). CM000019
01487 **43A130 MOVE B9 TO QPRTE (SQ-SUB) MOVE 1 TO SCA-SW. CM000019
01488 43A140 I9TI. MOVE B9 TO APT4 (APT-SUB). CM000019
01489 **43A050 I9TJ. ADD 1 TO APT-SUB. PERFORM PAT-M. CM000019
01490 43A160 MOVE B6 TO APT2 (APT-SUB) MOVE B7 TO APT3 (APT-SUB) CM000019
01491 43A170 MOVE B6B TO B-ST. CM000019
01492 43A171 PERFORM B-UPDATE. CM000019
01493 **43A180 I9TK. IF BT6B NOT = B-ST MOVE 902 TO CEB MOVE 11 TO CEA PERFORM CM000019
01494 43A19 C-WRIT CLOSE B-FILE GO TO I-10. MOVE BT7 TO APT4 (APT-SUB). CM000019
01495 43A200 IF BT8B = 'PB1' OR BT8B = 'PB2' ADD 1 TO APT-SUB MOVE BT8 CM000019
01496 43A210 TO APT2 (APT-SUB) MOVE BT9 TO APT3 (APT-SUB) PERFORM PAT-M CM000019
01497 43A220 MOVE 1 TO PB-SW2 CM000019
01498 43A221 MOVE BT8B TO B-ST. CM000019
01499 43A222 IF B3TRRB = '0' OR '1' OR '2' OR '3' OR '4' OR '5' OR '6' CM000019
01500 **43A222 OR '7' OR '8' OR '9' GO TO M19TK. CM000019
01501 43A223 IF M-SW3 = 0 CM000019
01502 43A224 MOVE 1 TO M-SW3 CM000019
01503 43A225 MOVE BT3 TO M-4ST CM000019
01504 43A226 GO TO M19TK. CM000019
01505 43A227 IF B3TRRA = M-ST4 GO TO M19TK. CM000019
01506 43A228 MOVE BT3 TO M-5ST. CM000019
01507 43A229 M19TK. CM000019
01508 43A231 MOVE BT3 TO P9 (HK-SUB) CM000019
01509 43A240 PERFORM BT-UPDATE CLOSE B-FILE GO TO I-10. CM000019
01510 43B010 S39-SET. IF O-SW1 = 1 GO TO I9TL. IF O-SW2 NOT = 1 GO TO I9TH. CM000019
01511 43B020 IF THRU-SW NOT = S-ST1 GO TO I9TL. MOVE B-ST TO S-ST2. CM000019
01512 43B030 MOVE 2 TO APT5 (APT-SUB). CM000019
01513 43B040 I9TL. IF A13A NOT = SPACE OR A15A NOT = SPACE OR A16B = SPACE CM000019
01514 43B05 GO TO I9TH. PERFORM SQUID-ROUTINE MOVE B7 TO CM000019
01515 43B051 QPRTE (SQ-SUB) CM000019
01516 43B052 MOVE B6 TO QPRTE (SQ-SUB) CM000019
01517 43B060 MOVE 1 TO SCA-SW. CM000019
01518 43B070 I9TH. MOVE B7 TO APT4 (APT-SUB). CM000019
01519 43B080 I9TH. ADD 1 TO APT-SUB. PERFORM PAT-M. MOVE B8 CM000019
01520 43B090 TO APT2 (APT-SUB) MOVE B9 TO APT3 (APT-SUB) MOVE B8B TO B-ST. CM000019
01521 43B091 MOVE B3 TO P9 (HK-SUB) MOVE 1 TO P15 (HK-SUB) CM000019
01522 43B092 PERFORM B-UPDATE. CM000019
01523 43B100 GO TO I9TK. CM000019
01524 **045010 (-10. CM000019
01525 045020 MOVE 3 TO STA-SW. ALTER I7AA TO PROCEED TO I7HA. CM000019
01526 MOVE A21 TO P12 (HK-SUB). CM000019
01527 MOVE 14 TO P11 (HK-SUB). CM000019
01528 MOVE 11 TO P13 (HK-SUB). CM000019
01529 MOVE (TEM-ND TO P14 (HK-SUB). CM000019
01530 045030 IF 110 = SPACE GO TO A-20. CM000019
01531 045031 IF 110B = '-' OR 110C = '-' GO TO 1. CM000019
01532 045040 IF 110C = SPACE GO TO 110KA. CM000019
01533 045050 IF 110D = SPACE GO TO 110KB. CM000019
01534 045060 IF 110E = SPACE GO TO 110KC. CM000019
01535 045070 MOVE 110 TO ST-7. ALTER I7AA TO PROCEED TO I7GA. CM000019
01536 ** 45071 MOVE 27 TO FLIP-SW. CM000019

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01537	045080	GO TO B7-OPEN.	CM000019
01538	045090	A-20.	CM000019
01539	045100	IF A20 = SPACE GO TO STA-CK.	CM000019
01540	045110	IF A20B = SPACE GO TO I10K0.	CM000019
01541	045120	MOVE A20 TO ST-2. ALTER I7AA TO PROCEED TO I7BA.	CM000019
01542	045130	MOVE 27 TO FLIP-SW. GO TO B7-OPEN.	CM000019
01543	045140	I10KA.	CM000019
01544	045150	IF A20B = SPACE GO TO I10KE.	CM000019
01545	045160	MOVE I10AR TO ST-1. MOVE A20B TO ST-3.	CM000019
01546	045170	ALTER I7AA TO PROCEED TO I7CA.	CM000019
01547	045180	MOVE 27 TO FLIP-SW. GO TO B7-OPEN.	CM000019
01548	045190	I10KB.	CM000019
01549	** 4520	IF A20BR = SPACE GO TO I10KF.	
01550	045210	MOVE I10AR TO ST-1. MOVE I10C TO ST-5.	CM000019
01551	** 4522	MOVE A20BR TO ST-6. ALTER I7AA TO PROCEED TO I7EA.	
01552	045230	MOVE 27 TO FLIP-SW.	CM000019
01553	045240	GO TO B7-OPEN.	
01554	**044010	I10KC.	CM000019
01555	044020	MOVE I10AR TO ST-1. MOVE I10BR TO ST-3.	CM000019
01556	044030	ALTER I7AA TO PROCEED TO I7CA.	CM000019
01557	044040	MOVE 28 TO FLIP-SW. GO TO B7-OPEN.	CM000019
01558	044050	I10KD.	CM000019
01559	044060	MOVE A20A TO ST-1. MOVE 27 TO FLIP-SW.	CM000019
01560	044070	GO TO B7-OPEN.	CM000019
01561	044080	I10KE.	CM000019
01562	044090	MOVE I10A TO ST-1. MOVE 27 TO FLIP-SW.	CM000019
01563	044100	GO TO B7-OPEN.	CM000019
01564	044110	I10KF.	CM000019
01565	044120	MOVE I10AR TO ST-1. MOVE I10C TO ST-5.	CM000019
01566	** 4413	MOVE 27 TO FLIP-SW.	
01567	044130	ALTER I7AA TO PROCEED TO I7FA. GO TO B7-OPEN.	CM000019
01568	044140	KPB-SET.	CM000019
01569	044160	IF PB-SW2 NOT = 1 GO TO I10TA.	CM000019
01570	044170	I10CB. GO TO I10OB.	CM000019
01571	044180	I10OB. IF B6B NOT = B-ST MOVE 15 TO FLIP-SW GO TO B7-RD.	CM000019
01572	044190	S110-SET.	CM000019
01573	044200	IF O-SW1 = 1 GO TO I10TB.	
01574	044201	IF O-SW2 = 1 IF I9 = SPACE IF A17 = SPACE	
01575	044202	GO TO S110-SETZ ELSE GO TO I10TB ELSE GO TO I10TB.	
01576	044210	IF O-SW4 NOT = 1 GO TO I10TC.	CM000019
01577	044211	S110-SETZ.	
01578	044220	IF THRU-SW NOT = S-ST1 GO TO I10TB.	CM000019
01579	044230	MOVE B-ST TO S-ST2.	CM000019
01580	044240	MOVE 2 TO APT5 (APT-SUB).	CM000019
01581	046010	I10TB.	CM000019
01582	046020	IF A13A NOT = SPACE OR A15A NOT = SPACE OR A18A NOT = SPACE	CM000019
01583	046030	OR A18B = SPACE GO TO I10TC.	CM000019
01584	046040	PERFORM SQUID-ROUTINE. MOVE B6 TO QPRTF (SQ-SUB).	CM000019
01585	046050	MOVE B7 TO QPRTF (SQ-SUB). MOVE 1 TO SCA-SW.	CM000019
01586	046060	GO TO I10AA.	CM000019
01587	046070	I10TC. MOVE B7 TO APT4 (APT-SUB).	CM000019
01588	** 46071	I10AA. IF I7-SWT = 1 MOVE 0 TO I7-SWT	
01589	46072	IF B6B = 'PB1' OR B6B = 'PB2'	
01590	46073	GO TO AA01I	
01591	46074	ELSE MOVE B6 TO P5A (HK-SUB)	
01592	46075	MOVE B7 TO P5B (HK-SUB).	
01593	46076	MOVE 0 TO I7-SWT.	

01594	46080	AAQ11. MOVE B3 TO P10 (HK-SUB) MOVE 1 TO P15 (HK-SUB)	
01595	** 46080	MA101.	CM000019
01596	046080	IF B3RRB = '0' OR '1' OR '2' OR '3' OR '4' OR '5' OR '6'	
01597	**046080	OR '7' OR '8' OR '9' GO TO MA101A.	
01598	** 46080	IF M-SW3 = 0	CM000019
01599	** 46080	MOVE 1 TO M-SW3	CM000019
01600	** 46080	MOVE B3 TO M-6ST.	
01601	046080	MA101A.	
01602	** 46081	PERFORM B-UPDATE CLOSE B-FILE GO TO STA-CK.	CM000019
01603	046090	I10TA.	CM000019
01604	046100	IF O-SW1 = 1 GO TO I10TD.	CM000019
01605	046110	IF O-SW2 = 1 GO TO I10TD.	CM000019
01606	046120	IF O-SW4 = 1 GO TO I10TD. GO TO I10AA	CM000019
01607	046130	I10TD. IF THRU-SW > S-ST1 GO TO I10AA.	
01608	046140	IF SQUIO-COUNT = 0 GO TO I10AA.	
01609	046150	I10CA. GO TO I100A.	CM000019
01610	046160	I100A. IF B6B = S-ST2 GO TO S110-SET.	CM000019
01611	046170	MOVE 17 TO FLIP-SW GO TO B7-RD.	CM000019
01612	046180	I10BA.	CM000019
01613	046190	IF S-ST2 = 'PB1' MOVE 'PB2' TO S-ST3 GO TO I10TE.	CM000019
01614	046200	IF S-ST2 = 'PB2' MOVE 'PB1' TO S-ST3.	CM000019
01615	046210	I10TE. ALTER I10CA TO PROCEED TO I10EA.	CM000019
01616	046220	MOVE 18 TO FLIP-SW GO TO B7-OPEN.	CM000019
01617	047010	I10EA. IF B6B NOT = S-ST3 GO TO B7-RD.	CM000019
01618	047020	MOVE B-CARD TO B-TEMP. CLOSE B-FILE.	CM000019
01619	** 47030	OPEN I-O B-FILE. MOVE 2 TO FLIP-SW.	
01620	047040	BJ-RD.	CM000019
01621	047050	READ B-FILE AT END GO TO I10-END.	CM000019
01622	047060	IF B5 NOT = 'INTR' GO TO BJ-RD.	CM000019
01623	047070	IF B10 NOT = SPACE GO TO BJ-RD.	CM000019
01624	047080	PERFORM B-TABLE.	CM000019
01625	047090	IF BSW-1 = 1 GO TO I10FA. GO TO BJ-RD.	CM000019
01626	047100	I10FA. IF B6B = S-ST2 GO TO S310-SET.	CM000019
01627	** 4711	IF BBB = S-ST2 GO TO S410-SET. GO TO BJ-RD.	
01628	047120	I10-END.	CM000019
01629	047121	CLOSE B-FILE.	
01630	047130	MOVE 101 TO CEB. MOVE 11 TO CEA PERFORM C-WRIT GO TO	CM000019
01631	047140	STA-CK.	CM000019
01632	047150	I10BB.	CM000019
01633	047160	IF B-ST = 'PB1' MOVE 'PB2' TO R-ST GO TO I10TF.	CM000019
01634	047170	IF B-ST = 'PB2' MOVE 'PB1' TO R-ST.	CM000019
01635	047180	I10TF. MOVE 16 TO FLIP-SW. ALTER I10CB TO PROCEED TO I10EB.	CM000019
01636	047190	GO TO B7-OPEN.	CM000019
01637	047200	I10EB.	CM000019
01638	047210	IF B6B NOT = R-ST GO TO B7-RD.	CM000019
01639	047220	MOVE B-CARD TO B-TEMP. CLOSE B-FILE.	CM000019
01640	** 4723	OPEN I-O B-FILE. MOVE 1 TO FLIP-SW.	
01641	048010	BK-RD. READ B-FILE AT END GO TO I10-END.	CM000019
01642	048020	IF B5 NOT = 'INTR' GO TO BK-RD.	CM000019
01643	048030	IF B10 NOT = SPACE GO TO BK-RD. PERFORM B-TABLE.	CM000019
01644	048040	IF BSW-1 NOT = 1 GO TO BK-RD.	CM000019
01645	** 4805	I10FB. IF B6B NOT = B-ST GO TO I10TG.	
01646	048050	S310-SET.	CM000019
01647	048070	IF O-SW1 = 1 GO TO I10TH.	CM000019
01648	048080	IF O-SW2 = 1 IF I9 = SPACE IF A17 = SPACE	
01649	048081	GO TO S310-SET22 ELSE GO TO I10TH ELSE GO TO I10TH.	
01650	048090	IF O-SW4 NOT = 1 GO TO I10TI.	CM000019

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01651 048091 S310-SET22.
01652 048100 IF THRU-SW NOT = S-ST1 GO TO I10TH. CM000019
01653 048110 MOVE B-ST TO S-ST2. MOVE 2 TO APT5 (APT-SUB). CM000019
01654 048120 I10TH. CM000019
01655 048130 IF A13A NOT = SPACE OR A15A NOT = SPACE OR A18A NOT = SPACE CM000019
01656 ** 4814 GO TO I10TI. PERFORM SQUID-ROUTINE.
01657 48141 MOVE B7 TO QPRTE (SQ-SUB)
01658 048150 MOVE 1 TO SCA-SW. MOVE S-ST2 TO QPRTF (SQ-SUB) GO TO I10TJ.
01659 048160 I10TI. MOVE B7 TO APT4 (APT-SUB). CM000019
01660 048170 I10TJ. ADD 1 TO APT-SUB. MOVE B8 TO APT2 (APT-SUB). PERFORM CM000019
01661 048180 PAT-M. MOVE B9 TO APT3 (APT-SUB). MOVE B8B TO B-ST. CM000019
01662 048190 I10TK. PERFORM B-UPDATE. CLOSE B-FILE. CM000019
01663 048200 IF BT6B = B-ST MOVE BT7 TO APT4 (APT-SUB)
01664 **048200 OPEN I-O B-FILE PERFORM BT-UPDATE
01665 ** 48200 PERFORM M110TK THRU M110TKX
01666 048201 MOVE BT3 TO P10 (HK-SUB)
01667 **048201 CLOSE B-FILE
01668 048210 GO TO STA-CK. MOVE 102 TO CEB MOVE I1 TO CEA PERFORM C-WRIT CM000019
01669 048220 GO TO STA-CK. CM000019
01670 ** 48221 M110TK. CM000019
01671 48222 IF B3TRRB = '0' OR '1' OR '2' OR '3' OR '4' OR '5' OR '6'
01672 ** 48222 OR '7' OR '8' OR '9' GO TO M110TKX.
01673 48223 IF M-SW3 = 0 CM000019
01674 48224 MOVE 1 TO M-SW3 CM000019
01675 48225 MOVE BT3 TO M-6ST.
01676 ** 48222 M110TKX. EXIT.
01677 049010 I10TG. IF B8B NOT = B-ST GO TO BK-RD. CM000019
01678 049020 S410-SET.
01679 049021 IF O-SW1 = 1 GO TO I10TL.
01680 049022 IF O-SW2 = 1 IF 19 = SPACE IF A17 = SPACE
01681 049023 GO TO S410-SET22 ELSE GO TO I10TL ELSE GO TO I10TL.
01682 049030 IF O-SW4 NOT = 1 GO TO I10TM. CM000019
01683 049031 S410-SET22.
01684 049040 IF THRU-SW = S-ST1 MOVE B-ST TO S-ST2 CM000019
01685 049050 MOVF 2 TO APT5 (APT-SUB). CM000019
01686 049060 I10TL. IF A13A NOT = SPACE OR A15A NOT = SPACE OR A18A NOT = CM000019
01687 049070 SPACE OR A18B = SPACE GO TO I10TM. PERFORM SQUID-ROUTINE. CM000019
01688 ** 49071 MOVE B8 TO QPRTF (SQ-SUB)
01689 049080 MOVE B9 TO QPRTE (SQ-SUB) MOVE 1 TO SCA-SW. GO TO I10TN. CM000019
01690 049090 I10TM. MOVE B9 TO APT4 (APT-SUB). CM000019
01691 ** 4910 I10TN. ADD 1 TO APT-SUB. PERFORM PAT-M.
01692 49101 MOVE B6 TO APT2 (APT-SUB)
01693 049110 MOVE B7 TO APT3 (APT-SUB). MOVE B6B TO B-ST. GO TO I10TK. CM000019
01694 **036010 B-TARLE. CM000019
01695 ** 36011 MOVE 1 TO BSW-1.
01696 5021 STA-CK. SUBTRACT 1 FROM THRU-SW. IF THRU-SW = ZERO GO TO
01697 5022 PRINT-OUT.
01698 50222 IF SCA-SW = 1 SUBTRACT 1 FROM SQUID-COUNT MOVE ZERO TO
01699 5023 SCA-SW.
01700 050230 IF SQUID-COUNT = 0 MOVE 0 TO O-SW1 O-SW2 O-SW4 S-ST1
01701 **050230 MOVE SPACE TO S-ST2 S-ST3.
01702 ** 50231 PERFORM END-ALT. CM000019
01703 ** 2025 MOVE ALN (THRU-SW) TO A-TEMP. PERFORM I-READ.
01704 5026 ADD 1 TO HK-SUB. GO TO ASQ-LK.
01705 5050 R-EXT. PERFORM OXX THRU HXX UNTIL THRU-SW < 2. GO TO ENDIT. CM000019
01706 5051 OXX. READ I-FILE AT END GO TO I-END. SUBTRACT 1 FROM THRU-SW.
01707 5052 HXX. EXIT. CM000019

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01708 5053 IA-END. GO TO I-END.
01709 5101 PRINT-OUT.
01710 5102 MOVE ZERO TO HK-SUB. MOVE ZERO TO PAT-SUB. CM000019
01711 5107 PERFORM HK-ROUT THRU HK-PREX UNTIL HK-SUB > 5. CM00
01712 5108 GO TO PAT-ROUT. CM000019
01713 5109 HK-ROUT. CM000019
01714 5112 ADD 1 TO HK-SUB. IF P15 (HK-SUB) = 1 MOVE P1 (HK-SUB) TO CM000019
01715 5113 PBT1 MOVE P2 (HK-SUB) TO PBT2 MOVE P3 (HK-SUB) TO PBT3 CM000019
01716 5114 MOVE P4 (HK-SUB) TO PBT4 MOVE P5A (HK-SUB) TO PBT5A
01717 51141 MOVE P5B (HK-SUB) TO PBT5B MOVE
01718 5115 P6 (HK-SUB) TO PBT6 MOVE P7 (HK-SUB) TO PBT7
01719 51151 MOVE P8 (HK-SUB)
01720 5116 TO PBT8 MOVE P9 (HK-SUB) TO PBT9 MOVE P10 (HK-SUB) TO PBT10 CM000019
01721 5117 MOVE P11 (HK-SUB) TO PBT11 MOVE P12 (HK-SUB) TO PBT12 MOVE CM000019
01722 5118 P13 (HK-SUB) TO PBT13 MOVE P14 (HK-SUB) TO PBT14 CM000019
01723 51181 MOVE P1A (HK-SUB) TO PBT1A
01724 51182 MOVE P16 (HK-SUB) TO PBT15 CM000019
01725 ** 51171 MOVE P14 (HK-SUB) TO PZM
01726 PERFORM CK-PZM
01727 51173 MOVE PZMP TO PBT14
01728 51174 MOVE P12 (HK-SUB) TO PZM
01729 051175 PERFORM CK-PZM
01730 ** 51178 MOVE PZMP TO PBT12
01731 5119 WRITE HK-PRT FROM EOUT-PRT.
01732 051210 HK-PREX. EXIT. CM000019
01733 ** 5201 PAT-ROUT. CM000019
01734 5205 PERFORM PT-ROUT THRU PTEX UNTIL PAT-SUB > 95. GO TO ENDIT.
01735 5206 PT-ROUT. CM000019
01736 5209 ADD 1 TO PAT-SUB. IF APT5 (PAT-SUB) = 1 GO TO PT-B. CM000019
01737 5210 IF APT5 (PAT-SUB) NOT = 2 GO TO PTEX. CM000019
01738 5211 IF APT2 (PAT-SUB) = 'PBI' PERFORM PT-B ELSE
01739 52111 PERFORM BTP. MOVE ZERO TO N-SUB.
01740 5212 PERFORM PT-S UNTIL N-SUB > 5. GO TO PTEX.
01741 5213 PT-S.
01742 52141 ADD 1 TO N-SUB CM000019
01743 52142 IF QPRTD (N-SUB) = 1 IF QPRTF (N-SUB) = 'PBI'
01744 MOVE QPRTA (N-SUB)
01745 52151 TO PAT1 MOVE QPRTB (N-SUB) TO PAT1A MOVE QPRTC (N-SUB) TO CM000019
01746 52152 PAT3 MOVE QPRTE (N-SUB) TO PAT4 MOVE QPRTF (N-SUB) TO PAT2
01747 ** 52152 MOVE SPACE TO TAP1 TAP2 TAP3 TAP4 MOVE 0 TO TAP1A
01748 ** 52152 ADD 1 TO SUB36 MOVE SUB36 TO PAT36 MOVE QPRTA (N-SUB) TO PZM
01749 PERFORM CK-PZM
01750 MOVE PZMP TO PZPAT
01751 ** 52152 WRITE PAT-PRT FROM BOUT-PRT
01752 ELSE PERFORM SQTP.
01753 52155 SQTP.
01754 52156 MOVE SPACE TO PAT1 PAT2 PAT3 PAT4 MOVE 0 TO PAT1A.
01755 52157 MOVE QPRTA (N-SUB) TO TAP1 MOVE QPRTB (N-SUB) TO TAP1A
01756 52158 MOVE QPRTC (N-SUB) TO TAP3 MOVE QPRTE (N-SUB) TO TAP4
01757 52159 MOVE QPRTF (N-SUB) TO TAP2.
01758 ** 52158 ADD 1 TO SUB36 MOVE SUB36 TO PAT36 MOVE QPRTA (N-SUB) TO PZM
01759 PERFORM CK-PZM
01760 MOVE PZMP TO PZPAT
01761 52159 WRITE PAT-PRT FROM BOUT-PRT.
01762 52211 BTP.
01763 52212 MOVE SPACE TO PAT1 PAT2 PAT3 PAT4 MOVE 0 TO PAT1A.
01764 52213 MOVE APT1 (PAT-SUB) TO TAP1. MOVE APT1A (PAT-SUB) TO TAP1A.

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01765 52214 MOVE APT2 (PAT-SUB) TO TAP2. MOVE APT3 (PAT-SUB) TO TAP3.
01766 52215 MOVE APT4 (PAT-SUB) TO TAP4.
01767 ** 52214 ADD 1 TO SUB36 MOVE SUB36 TO PAT36 MOVE APT1 (PAT-SUB) TO P2M
01768 PERFORM CK-P2M
01769 MOVE P2MP TO P2PAT
01770 52216 WRITE PAT-PRT FROM BOUT-PRT.
01771 052160 PT-B. CM000019
01772 ** 52161 IF APT2 (PAT-SUB) = 'PB1 ' NEXT SENTENCE ELSE
01773 52162 PERFORM RTP GO TO PTX.
01774 ** 52161 MOVE APT1 (PAT-SUB) TO PAT1. MOVE APT1A (PAT-SUB) TO PAT1A. CM000019
01775 052170 MOVE APT2 (PAT-SUB) TO PAT2. MOVE APT3 (PAT-SUB) TO PAT3. CM000019
01776 052180 MOVE APT4 (PAT-SUB) TO PAT4. CM000019
01777 ** 52190 MOVE SPACE TO TAP1 TAP2 TAP3 TAP4 MOVE 0 TO TAP1A.
01778 ** 52180 ADD 1 TO SUB36 MOVE SUB36 TO PAT36 MOVE APT1 (PAT-SUB) TO P2M
01779 PERFORM CK-P2M
01780 MOVE P2MP TO P2PAT
01781 5221 WRITE PAT-PRT FROM BOUT-PRT.
01782 052200 PTX. EXIT. CM000019
01783 053010 ENOIT. CM000019
01784 ** 53011 MOVE 0 TO SUB36
01785 5302 MOVE ZERO TO C-SW.
01786 053021 MOVE ZERO TO SQ-SUB. CM000019
01787 ** 5308 MOVE ZERO TO PB-SW2.
01788 053090 MOVE ZERO TO O-SW1. MOVE ZERO TO O-SW2. MOVE ZERO TO O-SW4. CM000019
01789 ** 5313 MOVE ZERO TO THRU-SW. MOVE ZERO TO P-CNT. MOVE ZERO TO CSW-1. CM000019
01790 CK-MULTOUT.
01791 IF M-SW1 = 1 OR M-SW2 = 1 OR M-SW3 = 1 NEXT SENTENCE ELSE CM000019
01792 GO TO M-BACK. CM000019
01793 OPEN I-O B-FILE.
01794 RD-MBFILE. CM000019
01795 READ B-FILE AT END GO TO MUL-END. CM000019
01796 IF B3RRA = M-ST1 OR B3RRA = M-ST2 OR B3RRA = M-ST3 CM000019
01797 OR B3RRA = M-ST4 OR B3RRA = M-ST5 OR B3RRA = M-ST6 CM000019
01798 NEXT SENTENCE ELSE GO TO RD-MBFILE.
01799 IF B3RR8 = '0' OR '1' OR '2' OR '3' OR '4' OR '5' OR '6'
01800 OR '7' OR '8' OR '9' GO TO RD-MBFILE.
01801 PERFORM B-TABLE. IF BSW-1 = 1 PERFORM B-UPDATE.
01802 GO TO RD-MBFILE.
01803 MUL-END. CM000019
01804 CLOSE B-FILE. CM000019
01805 MOVE 0 TO M-SW1 M-SW2 M-SW3. CM000019
01806 MOVE '9999' TO M-ST1 M-ST2 M-ST3 M-ST4 M-ST5 M-ST6.
01807 M-BACK.
01808 53101 MOVE ZERO TO CSW-2. MOVE SPACE TO B-ST. MOVE SPACE TO R-ST. CM000019
01809 53102 MOVE ZERO TO PB-SW1.
01810 53104 MOVE ZERO TO HK-SUB. MOVE ZERO TO AL-SUB. MOVE ZERO TO BSW-1. CM000019
01811 53105 MOVE ZERO TO BSW-2. MOVE ZERO TO PAT-SUB. CM000019
01812 53106 MOVE ZERO TO N-SUB.
01813 ** 53106 MOVE 0 TO S-ST1.
01814 053107 MOVE 0 TO APT-SUB.
01815 053108 MOVE SPACE TO S-ST2.
01816 053109 MOVE 0 TO SQUID-COUNT SCA-SW.
01817 ** 5310A END-ALT. CM000019
01818 5310B MOVE ZERO TO PB-SW1 PB-SW2 STA-SW.
01819 5310C MOVE SPACE TO B-ST R-ST. CM000019
01820 53107 ALTER I7AA TO PROCEED TO I7HA.
01821 5310B ALTER AP8-SET TO PROCEED TO BP8-SET.

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01822	53109	ALTER GJMP TO PROCEED TO IJMP.	
01823	5311	ALTER I9GC TO PROCEED TO I9HC.	
01824	53111	ALTER I980 TO PROCEED TO I98E.	
01825	53112	ALTER I10CA TO PROCEED TO I10DA.	
01826	53113	ALTER I10CB TO PROCEED TO I10DB.	
01827	53114	WH-TO.	
01828	** 5310	GO TO A-OPEN.	
01829	053120	I-END.	CM000019
01830	** 53122	OPEN OUTPUT O-CARD.	CM000019
01831	053123	CLOSE A-FILE.	
01832	053124	IF CF-SW = 0 CLOSE C-FILE.	
01833	** 803	OPEN INPUT A-FILE.	
01834	8031	WRITE PRT-REC FROM AAAA-HD AFTER AAAA-H.	
01835	8032	GO TO AJECT.	
01836	00804	READ-A.	CM000020
01837	00805	READ A-FILE AT END GO TO START-8.	CM000020
01838	** 8051	MOVE A-CARD TO A-TEMP.	
01839	00806	MOVE A1 TO A1H	MOVE A1B TO A1BH
01840	00807	MOVE A2 TO A2H	MOVE A3 TO A3H
01841	00808	MOVE A4 TO A4H	MOVE A5 TO A5H
01842	00809	MOVE A6 TO A6H	MOVE A7 TO A7H
01843	00810	MOVE A8 TO A8H	MOVE A9 TO A9H
01844	00811	MOVE A10 TO A10H	MOVE A11 TO A11H
01845	00812	MOVE A12 TO A12H	MOVE A13 TO A13H
01846	00813	MOVE A14 TO A14H	MOVE A15 TO A15H
01847	00814	MOVE A16 TO A16H	MOVE A17 TO A17H
01848	00815	MOVE A18 TO A18H	MOVE A19 TO A19H
01849	00816	MOVE A20 TO A20H	MOVE A21 TO A21H
01850	00817	WRITE PRT-REC FROM BA-HD AFTER 8AA.	CM000020
01851	** 8171	MOVE ' ' TO 8AA.	
01852	00818	ADD 1 TO A-CT.	CM000020
01853	00819	IF A-CT > 49 GO TO AJECT.	CM000020
01854	00820	GO TO READ-A.	CM000020
01855	00821	AJECT.	CM000020
01856	** 8211	MOVE 0 TO A-CT.	
01857	00822	WRITE PRT-REC FROM AA-HD AFTER AAA.	CM000020
01858	00823	WRITE PRT-REC FROM AAA-HD AFTER AAAA.	CM000020
01859	** 8231	MOVE '0' TO BAA.	
01860	00824	MOVE '1' TO AAA.	CM000020
01861	00825	GO TO READ-A.	CM000020
01862	** 01	START-B.	CM000020
01863		CLOSE A-FILE.	
01864	03	OPEN I-O 8-FILE. WRITE PRT-REC FROM 8BB-HD AFTER 0.	CM000020
01865		MOVE 50 TO 8-CT.	
01866	05	GO TO 8-JECT.	CM000020
01867	06	READ-8C.	CM000020
01868	10	READ B-FILE AT END GO TO START-C.	
01869	16	BO. MOVE 81 TO 81H	MOVE 82 TO 82H
01870	17	MOVE 83 TO 83H	MOVE 84 TO 84H
01871	18	MOVE 85 TO 85H	MOVE 86 TO 86H
01872	19	MOVE 87 TO 87H	MOVE 88 TO 88H
01873	20	MOVE 89 TO 89H	MOVE 810 TO 810H
01874	21	MOVE 811 TO 811H	
01875	** 11	WRITE PRT-REC FROM BB-HD AFTER 8BB.	
01876	222	MOVE ' ' TO 8BB.	
01877	23	ADD 1 TO B-CT	CM000020
01878	24	PERFORM 8-JECT.	CM000020

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01879		GO TO READ-BC.	
01880	** 05	B-JECT.	CM000020
01881	06	IF B-CT > 49	CM000020
01882		MOVE 0 TO B-CT	
01883	07	WRITE PRT-REC FROM AB-HD AFTER AB8	CM000020
01884	08	MOVE '1' TO AB8	CM000020
01885	** 061	MOVE '0' TO B88	
01886	09	WRITE PRT-REC FROM AB8-HD AFTER AB88.	CM000020
01887	10	B160. GO TO READ-BC.	CM000020
01888	** 03	START-C.	CM000020
01889	04	CLOSE B-FILE.	CM000020
01890		OPEN 1-D C-FILE.	
01891	06	WRITE PRT-REC FROM ACCC-HD AFTER 0.	CM000020
01892	07	MOVE 50 TO C-CT.	CM000020
01893	08	GO TO C-JECT.	CM000020
01894		PASFOUR.	
01895		READ C-FILE AT END GO TO CFEND.	
01896	09	READ-CF.	CM000020
01897	10	READ C-FILE AT END GO TO CFEND.	CM000020
01898		IF IFCLIST = '0' GO TO ONLY-ASGIN.	
01899	16	CO. MOVE C1 TO C1H	
01900	17	MOVE C3 TO C3H	MOVE C4A TO C4AH
01901	18	MOVE C4B TO C4BH	MOVE C4C TO C4CH
01902	19	MOVE C5 TO C5H	MOVE C6 TO C6H
01903	20	MOVE C7A TO C7AH	MOVE C7B TO C7BH
01904	21	MOVE C8 TO C8H	MOVE C9 TO C9BH
01905	22		MOVE C10A TO C10AH
01906		MOVE C11A TO C11AH.	
01907	24	MOVE C11B TO C11BH	MOVE C12 TO C12H
01908	** 01	WRITE PRT-REC FROM BC-HD AFTER BCC.	
01909	012	MOVE ' ' TO BCC.	
01910	02	ADD 1 TO C-CT	CM000020
01911	03	PERFORM C-JECT.	CM000020
01912	04	GOC. GO TO READ-CF.	CM000020
01913	09	C-JECT.	CM000020
01914	10	IF C-CT > 49 MOVE 0 TO C-CT	CM000020
01915	111	MOVE '0' TO BCC	
01916	** 11	WRITE PRT-REC FROM AC-HD AFTER ACC	CM000020
01917	12	MOVE '1' TO ACC	CM000020
01918	13	WRITE PRT-REC FROM ACC-HD AFTER ACCC.	CM000020
01919	** 18	GO TO READ-CF.	CM000020
01920		ONLY-ASGIN.	
01921		IF C9 NOT = '0' GO TO READ-CF.	
01922		IF C1 NOT = TSTCELL GO TO READ-CF.	
01923		IF C5 = SPACE GO TO READ-CF.	
01924		PERFORM C3.	
01925		PERFORM PASFOUR.	
01926		PERFORM C3.	
01927		PERFORM PASFOUR.	
01928		PERFORM C3.	
01929		PERFORM PASFOUR.	
01930		PERFORM C3.	
01931		PERFORM PASFOUR.	
01932		PERFORM C3.	
01933		GO TO READ-CF.	
01934	19	CFEND.	CM000020
01935	** 02	CLOSE C-FILE.	CM000020

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01936      53181      GO TO PED.
01937      CK-PZM.
01938      IF PZ4 = SPACE IF PZ3 = SPACE
01939      IF PZ2 = SPACE IF PZ1 = SPACE
01940      MOVE SPACE TO PZMP1 PZMP2 PZMP3 PZMP4
01941      ELSE MOVE PZ1 TO PZMP4 MOVE SPACE TO PZMP1 PZMP2 PZMP3
01942      ELSE MOVE PZ1 TO PZMP3 MOVE PZ2 TO PZMP4
01943      MOVE SPACE TO PZMP1 PZMP2
01944      ELSE MOVE PZ1 TO PZMP2 MOVE PZ2 TO PZMP3
01945      MOVE PZ3 TO PZMP4 MOVE SPACE TO PZMP1
01946      ELSE MOVE PZ1 TO PZMP1
01947      MOVE PZ2 TO PZMP2 MOVE PZ3 TO PZMP3 MOVE PZ4 TO PZMP4.
01948      BCK-PZM.
01949      IF PZ3 = SPACE IF PZ2 = SPACE IF PZ1 = SPACE
01950      MOVE SPACE TO PZMP1 PZMP2 PZMP3
01951      ELSE MOVE PZ1 TO PZMP3 MOVE SPACE TO PZMP1 PZMP2
01952      ELSE MOVE PZ2 TO PZMP3 MOVE PZ1 TO PZMP2 MOVE SPACE TO PZMP1
01953      ELSE MOVE PZ1 TO PZMP1 MOVE PZ2 TO PZMP2 MOVE PZ3 TO PZMP3.
01954      5323 PED. CLOSE I-FILE. CLOSE PRT-A. CLOSE PRT-B. CLOSE O-CARD. CM000019
01955      OPEN I-O B-FILE. OPEN OUTPUT B-UPTAPE.
01956      B-PED.
01957      READ B-FILE AT END GO TO C-PED.
01958      WRITE B-UPTAPE FROM B-CARD.
01959      GO TO B-PED.
01960      C-PED.
01961      CLOSE B-FILE B-UPTAPE.
01962      OPEN I-O C-FILE OUTPUT C-UPTAPE.
01963      C-PEDR.
01964      READ C-FILE AT END GO TO C-PEDEND.
01965      WRITE C-UPTAPE FROM C-CARD.
01966      GO TO C-PEDR.
01967      C-PEDEND.
01968      CLOSE C-FILE C-UPTAPE.
01969      ** 1061      STOP RUN.
01970      077010 1.
01971      077011      MOVE 77 TO FLIP-SW.
01972      077072      IF I10A = 'M' IF I10B = 'T' GO TO 2.
01973      **077030      IF I10A = 'D' GO TO 3.
01974      077040      IF I10A = 'M' IF I10B = 'R' GO TO 4.
01975      077050      IF I10A = 'E' IF I10B = 'R' GO TO 4.
01976      077070      DISPLAY '077070 ' I10.
01977      ** 77080      GO TO STA-CK.
01978      077100 2.
01979      077110      ALTER I7AA TO PROCEED TO 21.
01980      077120      GO TO B7-OPEN.
01981      077130 21.
01982      077140      IF I10AR NOT = B3KA GO TO B7-RD.
01983      077150      IF I10D NOT = N-B3 GO TO B7-RD.
01984      077151      IF A20A = 'MT' GO TO 22.
01985      077160      GO TO B7AB-LK.
01986      077161 22.
01987      077162      IF A20B = SPACE GO TO B7AB-LK.
01988      077163      IF A20B NOT = B5B GO TO B7-RD.
01989      077164      GO TO B7AB-LK.
01990      077170 3.
01991      077180      ALTER I7AA TO PROCEED TO 31.
01992      077190      GO TO B7-OPEN.

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01993	077200	31.
01994	077210	IF I10ARR NOT = B3A GO TO B7-RD.
01995		IF I10C NOT = N-B3 GO TO B7-RD.
01996	077220	IF B5BRR NOT = I10D GO TO B7-RD.
01997	077230	IF B5CRR NOT = I10E GO TO B7-RD.
01998	077240	GO TO BTAB-LK.
01999	078010	4.
02000	078020	ALTER I7AA TO PROCEED TO 41.
02001	078030	GO TO B7-OPEN.
02002	078040	41.
02003	078050	IF I10AR NOT = B3RA GO TO B7-RD.
02004	078060	IF I10D NOT = N-B3 GO TO B7-RD.
02005	078080	GO TO BTAB-LK.

00001	001010	IDENTIFICATION DIVISION.		CM000036
00002	001020	PROGRAM-ID. 'CM000036'.		CM000036
00003	001030	AUTHOR. J M ROSE.		CM000036
00004	001040	ENVIRONMENT DIVISION.		CM000036
00005	001050	CONFIGURATION SECTION.		CM000036
00006	001060	SOURCE-COMPUTER. IBM-360 H50.		CM000036
00007	001070	OBJECT-COMPUTER. IBM-360 H50.		CM000036
00008	001080	INPUT-OUTPUT SECTION.		CM000036
00009	001090	FILE-CONTROL.		CM000036
00010	001100	SELECT PAT-IN ASSIGN 'P001' UTILITY.		CM000036
00011	001110	SELECT HK-IN ASSIGN 'H001' UTILITY.		CM000036
00012	001120	SELECT LISTT ASSIGN 'L001' UTILITY.		CM000036
00013	001121	SELECT SHK-IN ASSIGN 'S001' UTILITY.		CM000036
00014	001122	SELECT OT-PAT ASSIGN 'OP001' UTILITY.		CM000036
00015	001123	SELECT OT-HK ASSIGN 'OH001' UTILITY.		CM000036
00016		SELECT A-FILE ASSIGN 'AFILEREC' UTILITY.		
00017		SELECT A-UTAPE ASSIGN 'ATAPE' UTILITY.		
00018	001130	DATA DIVISION.		CM000036
00019	001140	FILE SECTION.		CM000036
00020	001150	FD PAT-IN	RECORDING F BLOCK 1 RECORDS RECORD 133	CM000036
00021	001160		LABEL RECORDS STANDARD DATA RECORD PIN.	CM000036
00022	001170	01 PIN.		CM000036
00023	001180	02 CCP	PICTURE X.	CM000036
00024	001190	02 FILLER1	PICTURE X(126).	
00025	001200	02 PCC	PICTURE 99.	
00026	001210	02 PITH	PICTURE XXXX.	
00027	002010	FD HK-IN	RECORDING F BLOCK 1 RECORDS RECORD 133	CM000036
00028	002020		LABEL RECORDS STANDARD DATA RECORD HIN.	CM000036
00029	002030	01 HIN.		CM000036
00030	002040	02 ALL-HIN	PICTURE X(133).	
00031	002050	FD SHK-IN	RECORDING F BLOCK 1 RECORDS RECORD 133	CM000036
00032	002060		LABEL RECORDS STANDARD DATA RECORD CIN.	CM000036
00033	002070	01 CIN.		CM000036
00034	002080	02 FILLER	PICTURE X.	CM000036
00035	002090	02 CPAR	PICTURE X(9).	CM000036
00036	002100	02 FILLER	PICTURE X(39).	CM000036
00037	002110	02 CDEV	PICTURE X(9).	CM000036
00038	002120	02 FILLER	PICTURE X.	CM000036
00039	002130	02 CPT	PICTURE X(7).	CM000036
00040	002140	02 FILLER	PICTURE XX.	CM000036
00041	002150	02 CUOC	PICTURE X(5).	CM000036
00042	002151	02 FILLER	PICTURE XX.	
00043	002152	02 CUOC	PICTURE XXXX.	
00044	002153	02 FILLER	PICTURE XXX.	
00045	002154	02 CSIGC	PICTURE XXXXX.	
00046	002160	02 FILLER	PICTURE X(11).	
00047	002161	02 ROUT.		
00048	002162	03 ROT1	PICTURE XX.	
00049	002163	03 ROT2	PICTURE XXX.	
00050	002164	03 RRT2	REDEFINES ROT2 PICTURE 999.	
00051	002165	02 FILLER	PICTURE X(10).	
00052	002170	02 CCAB	PICTURE XXXX.	
00053	002180	02 FILLER	PICTURE X(6).	
00054	002181	02 CITEM	PICTURE XXXX.	

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00055	002182	02 FILLER	PICTURE X(6).				
00056	003010	FD LISTT	RECORDING F	BLOCK 1	RECOROS	RECORD 133	CM000036
00057	003020		LABEL	RECOROS	STANDARD	DATA RECORD LIT.	CM000036
00058	003030	D1 LIT.					CM000036
00059	003040	02 FILLER	PICTURE X(133).				CM000036
00060	003050	F0 OT-PAT	RECORDING F BLOCK 1	RECOROS	RECORD 133	LABEL	
00061	003060		RECOROS STANDARD	DATA RECORD	OPOUT.		
00062	003070	01 OPOUT	PICTURE X(133).				
00063	003080	F0 OT-HK	RECORDING F BLOCK 1	RECOROS	RECORD 133	LABEL	
00064	003090		RECOROS STANDARD	DATA RECORD	OPOUT.		
00065	003100	01 OPOUT	PICTURE X(133).				
00066		FD A-UPTAPE	RECORDING F BLOCK 1	RECORDS	RECORD 80		
00067			LABEL	RECOROS STANDARD	DATA RECORD A-UPTAPER.		
00068		01 A-UPTAPER	PICTURE X(80).				
00069		F0 A-FILE	RECORDING F BLOCK 45	RECOROS	RECORD 80		
00070			LABEL	RECOROS STANDARD	DATA RECORD A-CARD.		
00071		01 A-CARD	PICTURE X(80).				
00072	004010	WORKING-STORAGE SECTION.					CM000036
00073	004020	77 PEJECT	PICTURE 99	COMPUTATIONAL-3	VALUE 51.		CM000036
00074	004030	77 CABCNT	PICTURE XXX	VALUE SPACE.			
00075	004050	77 TSW1	PICTURE 9	VALUE 0.			
00076	004060	77 TSW2	PICTURE 9	VALUE 0.			
00077	004070	77 TSW3	PICTURE 9	VALUE 0.			
00078	004080	77 TSW4	PICTURE 9	VALUE 0.			
00079	004090	77 J	PICTURE 999	VALUE 0.			
00080	004091	77 J	PICTURE 9	VALUE 0.			
00081	004092	77 K	PICTURE 9999	VALUE 0.			
00082	004110	01 LISTW.					CM000036
00083	004120	02 LCC	PICTURE X.				CM000036
00084	004130	02 FILLER2	PICTURE X(127).				CM000036
00085	004140	02 FILLER	PICTURE X(5)	VALUE SPACE.			CM000036
00086	005010	01 CAB-LINE.					CM000036
00087	005020	02 FILLER	PICTURE X(61)	VALUE ' CAB FROM			
00088	005030	'	TO WIREO '.				
00089	005031	02 FILLER	PICTURE X(9)	VALUE ' ITEM'.			
00090	005040	02 FILLER	PICTURE X(63)	VALUE SPACE.			
00091	005050	01 FAB-LINE.					CM000036
00092	005060	02 FILLER	PICTURE X(60)	VALUE ' FAB TRANSDUCER			
00093	005070	'	OEVCE POINT S.C. '.				
00094	005071	02 FILLER	PICTURE X(8)	VALUE ' NO'.			
00095	005080	02 FILLER	PICTURE X(65)	VALUE SPACE.			
00096	005090	01 CAB-HEAD.					CM000036
00097	005100	02 FILLER	PICTURE X(39)	VALUE ' .			
00098	005110	'	CABLE FAB'.				
00099	005120	02 FILLER	PICTURE X(94)	VALUE SPACE.			
00100	005130	01 CAB-LIST.					CM000036
00101	005140	02 FILLER	PICTURE X(9)	VALUE SPACE.			CM000036
00102	005150	02 LCAB	PICTURE XXXX.				
00103	005160	02 FILLER	PICTURE X(6)	VALUE SPACE.			CM000036
00104	005161	02 LPAR	PICTURE X(9).				
00105	005162	02 FILLER	PICTURE XXXX	VALUE SPACE.			
00106	005170	02 LOEV	PICTURE X(9).				CM000036
00107	005180	02 FILLER	PICTURE XXX	VALUE SPACE.			
00108	005190	02 LPT	PICTURE X(7).				CM000036
00109	005200	02 FILLER	PICTURE X(5)	VALUE SPACE.			CM000036
00110	005210	02 LUOC	PICTURE X(5)	VALUE SPACE.			CM000036
00111	005211	02 FILLER	PICTURE X(6)	VALUE SPACE.			

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00112	005212	02	LITEM	PICTURE	XXXX.				
00113	005220	02	FILLER	PICTURE	X(63)	VALUE	SPACE.		
00114	006010	01	ADOUT-PR.						CM000036
00115	006020	02	FILLER	PICTURE	X(17)	VALUE	SPACES.		CM000036
00116	006030	02	FILLER	PICTURE	X(16)	VALUE	'C		CM000036
00117	006040	02	FILLER	PICTURE	X(12)	VALUE	'FROM	TO	CM000036
00118	006050	02	FILLER	PICTURE	X(48)	VALUE	SPACE.		CM000036
00119	006060	02	FILLER	PICTURE	X(50)	VALUE	'C	FROM	CM000036
00120	006070								CM000036
00121	006080	01	ADOUT-PR.						CM000036
00122	006090	02	FILLER	PICTURE	X(23)	VALUE	'ITEM C	DEVICE	CM000036
00123	006100	02	FILLER	PICTURE	X(15)	VALUE	'POINT	POINT	CM000036
00124	006110	02	FILLER	PICTURE	X(39)	VALUE	SPACE.		CM000036
00125	006120	02	FILLER	PICTURE	X(56)	VALUE	'ITEM C	DEVICE	POINCM000036
00126	006130								CM000036
00127	007010	01	ADOUT-PR.						CM000036
00128	007020	02	FILLER	PICTURE	X(27)	VALUE	'PARAMETER C	NOMENCLATURE	CM000036
00129	007030	02	FILLER	PICTURE	X(26)	VALUE		I-NO. DEVI	CM000036
00130	007040	02	FILLER	PICTURE	X(26)	VALUE	'CE	POINT S.C. CARO	CM000036
00131	007050	02	FILLER	PICTURE	X(26)	VALUE	'CONO.	COND. READOUT	CM000036
00132	007060	02	FILLER	PICTURE	X(26)	VALUE	'NO. FA8 SK.	NO C	CM000036
00133	007070	02	FILLER	PICTURE	X(2)	VALUE	'		CM000036
00134	007080	01	ADOUT-PR.						CM000036
00135	007090	02	FILLER	PICTURE	X(27)	VALUE		C	CM000036
00136	007100	02	FILLER	PICTURE	X(26)	VALUE		TRAN	CM000036
00137	007110	02	FILLER	PICTURE	X(26)	VALUE	'CONNECTING	WIRED UDC	CM000036
00138	007120	02	FILLER	PICTURE	X(26)	VALUE	'SIG.	SIG.	CM000036
00139	007130	02	FILLER	PICTURE	X(26)	VALUE	'TYP	CAB LOC ITEM C	CM000036
00140	007140	02	FILLER	PICTURE	XX	VALUE	SPACE.		CM000036
00141	007150	01	ADOUT-PR.						CM000036
00142	007160	02	FILLER	PICTURE	X(34)	VALUE		PATCHING - PB1	
00143	007170								
00144	007180	02	FILLER	PICTURE	X(45)	VALUE	SPACE.		
00145	007190	02	FILLER	PICTURE	X(31)	VALUE		PATCHING - PB2	
00146	007200								
00147	007210	02	FILLER	PICTURE	X(22)	VALUE	SPACE.		
00148	007220	01	ADOUT-PR.						
00149	007230	02	FILLER	PICTURE	X(54)	VALUE	SPACE.		
00150	007240	02	FILLER	PICTURE	X(25)	VALUE	'HOOKUP INFORMATION		
00151	007250	02	FILLER	PICTURE	X(54)	VALUE	SPACE.		
00152		01	LISTER.						
00153		02	FILLER	PICTURE	X(117)				
00154		02	ILLER4	PICTURE	XX.				
00155		02	FILLER	PICTURE	XX.				
00156		02	ILLER3	PICTURE	XX.				
00157		02	FILLER	PICTURE	XXXX.				
00158		02	ILLER2	PICTURE	XX.				
00159		02	FILLER	PICTURE	X.				
00160		02	ILLER1	PICTURE	XXX.				
00161	008010	01	TABLES.						
00162	008020	02	TB1	OCCURS	4.				
00163	008030	03	TP	PICTURE	X(9)	OCCURS	100.		
00164	008040	03	TI	PICTURE	X(4)	OCCURS	100.		
00165	008050	03	TA	PICTURE	9(3)	OCCURS	100.		
00166	008060	01	DHEAD1.						
00167	008061	02	FILLER	PICTURE	X(4)	VALUE	SPACE.		
00168	008070	02	FILLER	PICTURE	X(73)	VALUE	'MICROSADIC REFERENCE SHE		

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NO.	PROJECT	SHEET	OF L.
00169	008080-	'ET	
00170	008090	02 FILLER	PICTURE X(55) VALUE SPACE.
00171	008100 01	DHEAD2.	
00172	008101	02 FILLER	PICTURE X(4) VALUE SPACE.
00173	008110	02 FILLER	PICTURE X(6) VALUE 'SCAN'.
00174	008120	02 FILLER	PICTURE X(19) VALUE SPACE.
00175	008130	02 FILLER	PICTURE X(4) VALUE 'ITEM'.
00176	008140	02 FILLER	PICTURE X(29) VALUE SPACE.
00177	008150	02 FILLER	PICTURE X(4) VALUE 'AMP'.
00178	008160	02 FILLER	PICTURE X(56) VALUE SPACE.
00179	008170 01	DHEAD3.	
00180	008171	02 FILLER	PICTURE X(4) VALUE SPACE.
00181	008180	02 FILLER	PICTURE X(73) VALUE ' SEQ. PARAMETER NO.
00182	008190-	' CAL STEP COUNTS NO. REMARKS'.	
00183	008200	02 FILLER	PICTURE X(55) VALUE SPACE.
00184	009010 01	DGLIST.	
00185	009020	02 FILLER	PICTURE X(6) VALUE SPACE.
00186	009030	02 DGSS	PICTURE 999.
00187	009040	02 FILLER	PICTURE X(6) VALUE SPACE.
00188	009050	02 DGPAP	PICTURE X(9).
00189	009060	02 FILLER	PICTURE X(5) VALUE SPACE.
00190	009070	02 OGIT	PICTURE X(4).
00191	009080	02 FILLER	PICTURE X(29) VALUE SPACE.
00192	009090	02 OGAM	PICTURE 999.
00193	009100	02 FILLER	PICTURE X(67) VALUE SPACE.
00194	**008010	PROCEDURE DIVISION.	CM000036
00195	008020	8EGP.	CM000036
00196	008021	MOVE 1 TO J.	
00197	008022	MOVE -1 TO K.	
00198	008023	PERFORM DOTAB VARYING I FROM 1 BY 1 UNTIL I = 101.	
00199	008024	MOVE 2 TO J	
00200	008025	MOVE 399 TO K	
00201	008026	PERFORM DOTAB VARYING I FROM 1 BY 1 UNTIL I = 101.	
00202	008027	MOVE 3 TO J	
00203	008028	MOVE 99 TO K	
00204	008029	PERFORM DOTAB VARYING I FROM 1 BY 1 UNTIL I = 101.	
00205	008030	MOVE 4 TO J	
00206	008031	MOVE 399 TO K	
00207	008032	PERFORM DOTAB VARYING I FROM 1 BY 1 UNTIL I = 101.	
00208	**008021	OPEN OUTPUT OT-PAT.	
00209	008030	OPEN INPUT PAT-IN OUTPUT LIST. GO TO P-JECT.	CM000036
00210	008031	DOTAB.	
00211	008032	ADD 1 TO K GIVING K	
00212	008033	MOVE K TO TA (J, I).	
00213	008034	MOVE SPACE TO TP (J, I) TI (J, I).	
00214	008040	READ-P.	CM000036
00215	008050	READ PAT-IN AT END GO TO BEGH.	CM000036
00216	008060	MOVE FILLER1 TO FILLER2.	CM000036
00217	008070	WRITE LIT FROM LISTW AFTER 2.	CM000036
00218	008071	WRITE OPOUT FROM PIN.	
00219	008080	ADD 2 TO PEJECT.	CM000036
00220	008100	P-JECT.	CM000036
00221	008110	IF PEJECT > 50 WRITE LIT FROM GOUT-PRT AFTER 0	CM000036
00222	008120	WRITE LIT FROM AOUT-PRT AFTER 2	CM000036
00223	008130	WRITE LIT FROM AOUT-PRT AFTER 1	CM000036
00224	008140	MOVE 0 TO PEJECT.	CM000036
00225	008150	GO TO READ-P.	CM000036

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00226	008160	BEGH.		CM000036
00227	008170	CLOSE PAT-IN.	MOVE 51 TO PEJECT.	CM000036
00228	008171	CLOSE OT-PAT	OPEN OUTPUT OT-HK.	
00229	008180	OPEN INPUT HK-IN.	GO TO H-JECT.	CM000036
00230	008190	READ-H.		CM000036
00231	008200	READ HK-IN AT END	GO TO BEGLH.	CM000036
00232	008210	MOVE ALL-HIN	TO LISTER.	
00233	008211	MOVE SPACE	TO ILLER1 ILLER2 ILLER3 ILLER4.	
00234	008220	WRITE LIT	FROM LISTER AFTER 2.	
00235	008221	WRITE OHOUT	FROM HIN.	
00236	008230	AOD 2'	TO PEJECT.	CM000036
00237	009010	H-JECT.		CM000036
00238	009020	IF PEJECT > 50	WRITE LIT FROM FOUT-PRT AFTER 0	CM000036
00239	009030	WRITE LIT	FROM COUT-PRT AFTER 2	CM000036
00240	009040	WRITE LIT	FROM COUT-PRT AFTER 1	CM000036
00241	009050	MOVE 0	TO PEJECT.	CM000036
00242	009060	GO TO	READ-H.	CM000036
00243	009070	BEGH.		CM000036
00244	009080	CLOSE HK-IN.		CM000036
00245	009081	CLOSE OT-HK.		
00246	009090	OPEN INPUT SHK-IN.		CM000036
00247		MOVE 51	TO PEJECT. GO TO L-JECT.	
00248	009120	READ-L.		CM000036
00249	009130	READ SHK-IN AT END	GO TO EOF.	CM000036
00250	009131	PERFORM	DGTAL THRU OEX.	
00251	009140	IF CCA8 = SPACE	GO TO READ-L.	CM000036
00252	009150	MOVE CCA8	TO LCA8.	CM000036
00253	009151	MOVE CPAR	TO LPAR.	
00254	009152	MOVE CITEM	TO LITEM	
00255	009160	MOVE COEV	TO LOEV.	CM000036
00256	009170	MOVE CPT	TO LPT.	CM000036
00257	009180	MOVE CUOC	TO LUOC.	
00258	009181	IF CUOC = SPACE	MOVE CSIGC TO LUOC.	
00259	009190	WRITE LIT	FROM CAB-LIST AFTER 2.	CM000036
00260	009200	AOD 2	TO PEJECT.	CM000036
00261	009210	L-JECT.		CM000036
00262	009220	IF PEJECT > 50	WRITE LIT FROM CAB-HEAD AFTER 0	CM000036
00263	009230	WRITE LIT	FROM CAB-LINE AFTER 2	CM000036
00264	009240	WRITE LIT	FROM CAB-LINE AFTER 1	CM000036
00265	009250	MOVE 0	TO PEJECT. GO TO READ-L.	CM000036
00266	010010	EOF.		CM000036
00267		OPEN I-O A-FILE.	OPEN OUTPUT A-UPTAPE.	
00268		A-PED.		
00269		READ A-FILE AT END	GO TO A-PEDEND.	
00270		WRITE A-UPTAPER	FROM A-CARD.	
00271		GO TO	A-PEO.	
00272		A-PEDEND.		
00273	014	PERFORM	TAKOUT THRU TEX	
00274		CLOSE A-FILE	A-UPTAPE.	
00275	**010020	CLOSE SHK-IN	LISTT.	CM000036
00276	010030	STOP	RUN.	CM000036
00277	011010	DGTAL.		
00278	011020	IF ROT1 NOT = 'MC'	GO TO OEX.	
00279	011030	IF RRT2 < 100	GO TO OG100.	
00280	011040	IF RRT2 < 200	GO TO OG200.	
00281	011050	IF RRT2 < 400	GO TO OG400.	
00282	011060	IF RRT2 > 499	GO TO OG500. MOVE 2 TO J MOVE 0 TO I.	

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00283 011070  PERFORM INTB THRU INX.  MOVE 4 TO J  MOVE 0 TO I.
00284 011080  PERFORM INTB THRU INX.
00285 011090  MOVE 1 TO TSM2 TSM4.
00286 011100  GO TO DEX.
00287 011110  INTB.  ADD 1 TO I.
00288 011120  IF I > 100 DISPLAY 'I>100' GO TO INX.
00289 011130  IF TA (J, I) = RRT2  MOVE CPAR TO TP (J, I)
00290 011140  MOVE CITEM TO TI (J, I) GO TO INX.
00291 011150  GO TO INTB.
00292 011160  INX.  EXIT.
00293 011170  OG100.
00294 011180  MOVE 0 TO I.  MOVE 1 TO J..
00295 011190  PERFORM INTB THRU INX.  MOVE 1 TO TSW1.
00296 011200  GO TO DEX.
00297 011210  DG200.
00298 011220  MOVE 0 TO I.  MOVE 3 TO J.
00299 011230  PERFORM INTB THRU INX.
00300 011240  MOVE 1 TO TSW3.
00301 011250  GO TO DEX.
00302 012010  OG400.
00303 012020  DISPLAY '200<RTT2<400'
00304 012030  GO TO DEX.
00305 012040  OG500.
00306 012050  DISPLAY 'READOUT TOO LARGE'.
00307 012060  DEX.  EXIT.
00308 013010  TAKOUT.
00309 013020  MOVE 0 TO K.
00310 013030  MOVE 1 TO J.
00311 013040  IF TSW1 = 1  PERFORM WHDS
00312 013050  PERFORM WTAB VARYING I FROM 1 BY 1 UNTIL I > 100.
00313 013060  IF TSW2 NOT = 1  GO TO CKSW3.
00314 013070  IF TSW1 NOT = 1  GO TO CKSW3.
00315 013080  IF TSW3 NOT = 1  GO TO CKSW4.
00316 013090  MOVE 2 TO J.
00317 013100  PERFORM WHDS.
00318 013110  PERFORM WTAB VARYING I FROM 1 BY 1 UNTIL I > 100.
00319 013120  CKSW3.
00320 013130  MOVE 3 TO J
00321 013140  IF TSW3 = 1  PERFORM WHDS
00322 013150  PERFORM WTAB VARYING I FROM 1 BY 1 UNTIL I > 100.
00323 013160  CKSW4.
00324 013170  MOVE 4 TO J
00325 013180  IF TSW4 = 1  PERFORM WHDS
00326 013190  PERFORM WTAB VARYING I FROM 1 BY 1 UNTIL I > 100.
00327 013200  TEX.
00328 013210  EXIT.
00329 013220  WTAB.
00330 013230  ADD 1 TO K.
00331 013240  MOVE K TO DGSS.
00332 014050  IF PEJECT = 25  PERFORM WHDS.
00333 **013250  MOVE TA (J, I) TO OGAM.
00334 014010  MOVE TP (J, I) TO OGPAP.
00335 014020  MOVE TI (J, I) TO OGIT.
00336 014030  WRITE LIT FROM OGLIST AFTER 2.
00337 014040  ADD 1 TO PEJECT
00338 014060  WHDS.
00339 014070  WRITE LIT FROM DHEAD1 AFTER 0.

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00340	014080	WRITE LIT FROM DHEAD2 AFTER 2.
00341	014090	WRITE LIT FROM DHEAD3 AFTER 1.
00342	014100	MOVE 0 TO PEJECT.

00001	00101	IDENTIFICATION DIVISION.	CM000085
00002	00102	PROGRAM-ID. 'CM000085'.	CM000085
00003	00103	AUTHOR. ROSE.	CM000085
00004	001031	DATE-WRITTEN. FEB, 1968.	
00005	001032	DATE-COMPILED. JAN 23, 1970	
00006	00104	ENVIRONMENT DIVISION.	CM000085
00007	00105	CONFIGURATION SECTION.	CM000085
00008	00106	SOURCE-COMPUTER. IBM-360.	CM000085
00009	00107	OBJECT-COMPUTER. IBM-360.	CM000085
00010	00108	INPUT-OUTPUT SECTION.	CM000085
00011	00109	FILE-CONTROL.	CM000085
00012	00112	SELECT I-FILE ASSIGN 'I001' UTILITY.	CM000085
00013	00113	SELECT A-FILE ASSIGN 'A001' UTILITY.	CM000085
00014	00114	SELECT B-FILE ASSIGN 'B001' UTILITY.	CM000085
00015	00115	SELECT C-FILE ASSIGN 'C001' UTILITY.	CM000085
00016	00116	SELECT A-WORK ASSIGN 'AW01' UTILITY.	CM000085
00017	00117	SELECT B-WORK ASSIGN 'BW01' UTILITY.	CM000085
00018	00118	SELECT C-WORK ASSIGN 'CW01' UTILITY.	CM000085
00019	00119	SELECT HOOKUP ASSIGN 'H001' UTILITY.	CM000085
00020	00120	SELECT PATCH ASSIGN 'P001' UTILITY.	CM000085
00021	00121	SELECT W-HOOK ASSIGN 'WH01' UTILITY.	CM000085
00022	00122	SELECT W-PATH ASSIGN 'WP01' UTILITY.	CM000085
00023	00124	SELECT HK-OUT ASSIGN 'DH01' UTILITY.	CM000085
00024	00125	SELECT PT-OUT ASSIGN 'OP01' UTILITY.	CM000085
00025	00126	DATA DIVISION.	CM000085
00026	00127	FILE SECTION.	CM000085
00027	00201	FD I-FILE RECORDING F BLOCK 1 RECORDS RECORD 80 LABEL	CM000085
00028	00202	RECORDS OMITTED DATA RECORDS I-CARD A-CARD B-CARD C-CARD	CM000085
00029	002021	0-CARD.	CM000085
00030	00203	01 0-CARD.	CM000085
00031	00204	02 DPTN PICTURE X(7).	CM000085
00032	00206	02 FILLER PICTURE X(73).	CM000085
00033	00213	01 I-CARD.	CM000085
00034	00214	02 DELPARM PICTURE X(9).	CM000085
00035	00215	02 FILLER PICTURE X(71).	CM000085
00036	00301	01 A-CARD.	CM000085
00037	00302	02 A10 PICTURE XXXX.	
00038	00303	02 A20 PICTURE 9.	CM000085
00039	00304	02 FILLER PICTURE X(75).	
00040	00305	01 B-CARD.	CM000085
00041	00306	02 B10 PICTURE XXXX.	CM000085
00042	00307	02 B20 PICTURE 9.	CM000085
00043	00308	02 B30 PICTURE X(65).	CM000085
00044	00309	02 B100 PICTURE X(9).	CM000085
00045	00310	02 B110 PICTURE X.	CM000085
00046	00312	01 C-CARD.	CM000085
00047	00313	02 C10 PICTURE X(41).	CM000085
00048	00314	02 C40 PICTURE X(6).	CM000085
00049	00315	02 C50 PICTURE X(33).	CM000085
00050	00401	FD A-FILE RECORDING F BLOCK 45 RECORDS RECORD 80	
00051	00402	LABEL RECORDS STANDARD DATA RECORD AIN.	CM000085
00052	00403	01 AIN.	CM000085
00053	00404	02 A1 PICTURE XXXX.	
00054	00405	02 A2 PICTURE 9.	CM000085

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00055	00406	02	A3	PICTURE X(75).	
00056	00408	FD	B-FILE	RECORDING F BLOCK 45 RECORDS RECORD 80	
00057	00409			LABEL RECORDS STANDARD DATA RECORD BIN.	CM000085
00058	00410	01	BIN.		CM000085
00059	00411	02	B1	PICTURE XXXX.	CM000085
00060	00412	02	B2	PICTURE 9.	CM000085
00061	00413	02	B3	PICTURE X(65).	CM000085
00062	00414	02	B10	PICTURE X(9).	CM000085
00063	00415	02	B11	PICTURE X.	CM000085
00064	00417	FD	C-FILE	RECORDING F BLOCK 45 RECORDS RECORD 80	
00065	00418			LABEL RECORDS STANDARD DATA RECORD CIN.	CM000085
00066	00419	01	CIN.		CM000085
00067	00420	02	C1	PICTURE X(23).	CM000085
00068	00421	02	C2	PICTURE X(9).	CM000085
00069	00422	02	C3	PICTURE X(9).	CM000085
00070	00423	02	C4	PICTURE X(6).	CM000085
00071	00424	02	C5	PICTURE X(33).	CM000085
00072	00501	FD	HOKUP	RECORDING F BLOCK 1 RECORDS RECORD 133	CM000085
00073	00502			LABEL RECORDS STANDARD DATA RECORD HOK.	CM000085
00074	00503	01	HOK.		CM000085
00075	00504	02	H1	PICTURE X.	CM000085
00076	00505	02	H2	PICTURE X(9).	CM000085
00077	00506	02	H3	PICTURE X(113).	CM000085
00078	00507	02	H4	PICTURE XXXX.	CM000085
00079	00508	02	H5	PICTURE X(6).	CM000085
00080	00510	FD	PATCH	RECORDING F BLOCK 1 RECORDS RECORD 133	CM000085
00081	00511			LABEL RECORDS STANDARD DATA RECORD PAT.	CM000085
00082	00512	01	PAT.		CM000085
00083	00513	02	P1	PICTURE X.	CM000085
00084	00514	02	P2	PICTURE XXXX.	CM000085
00085	00515	02	P3	PICTURE X(72).	CM000085
00086	00516	02	P4	PICTURE XXXX.	CM000085
00087	00517	02	P5	PICTURE X(52).	CM000085
00088	00601	FD	W-HOOK	RECORDING F BLOCK 1 RECORDS RECORD 133	CM000085
00089	00602			LABEL RECORDS STANDARD DATA RECORD WHOK.	CM000085
00090	00603	01	WHOK.		CM000085
00091	00604	02	WH1	PICTURE X.	CM000085
00092	00605	02	WH2	PICTURE X(9).	CM000085
00093	00606	02	WH3	PICTURE X(113).	CM000085
00094	00607	02	WH4	PICTURE XXXX.	CM000085
00095	00608	02	WH5	PICTURE X(6).	CM000085
00096	00610	FD	W-PATH	RECORDING F BLOCK 1 RECORDS RECORD 133	CM000085
00097	00611			LABEL RECORDS STANDARD DATA RECORD WPAT.	CM000085
00098	00612	01	WPAT.		CM000085
00099	00613	02	WP1	PICTURE X.	CM000085
00100	00614	02	WP2	PICTURE XXXX.	CM000085
00101	00615	02	WP3	PICTURE X(72).	CM000085
00102	00616	02	WP4	PICTURE XXXX.	CM000085
00103	00617	02	WP5	PICTURE X(48).	CM000085
00104	00618	02	WP6	PICTURE XXXX.	CM000085
00105	00701	FD	HK-OUT	RECORDING F BLOCK 1 RECORDS RECORD 133	CM000085
00106	00702			LABEL RECORDS STANDARD DATA RECORD OHOK.	CM000085
00107	00703	01	OHOK.		CM000085
00108	00704	02	OH1	PICTURE X.	CM000085
00109	00705	02	OH2	PICTURE X(9).	CM000085
00110	00706	02	OH3	PICTURE X(113).	CM000085
00111	00707	02	OH4	PICTURE XXXX.	CM000085

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00112	00708	02	OH5	PICTURE X(6).	CM000085
00113	00710	FD	PT-OUT	RECORDING F BLOCK 1 RECORDS RECORD 133	CM000085
00114	00711			LABEL RECORDS STANDARD DATA RECORD OPAT.	CM000085
00115	00712	01	OPAT.		CM000085
00116	00713	02	OP1	PICTURE X.	CM000085
00117	00714	02	OP2	PICTURE XXXX.	CM000085
00118	00715	02	OP3	PICTURE X(72).	CM000085
00119	00716	02	OP4	PICTURE XXXX.	CM000085
00120	00717	02	OP5	PICTURE X(52).	CM000085
00121	00801	FD	A-WORK	RECORDING F BLOCK 45 RECORDS RECORD 80	
00122	00802			LABEL RECORDS STANDARD DATA RECORD AWRK.	CM000085
00123	00803	01	AWRK.		CM000085
00124	00804	02	A1W	PICTURE XXXX.	
00125	00805	02	A2W	PICTURE 9.	CM000085
00126	00806	02	FILLER	PICTURE X(75).	
00127	00808	FD	B-WORK	RECORDING F BLOCK 45 RECORDS RECORD 80	
00128	00809			LABEL RECORDS STANDARD DATA RECORD BWRK.	CM000085
00129	00810	01	BWRK.		CM000085
00130	00811	02	B1W	PICTURE XXXX.	CM000085
00131	00812	02	B2W	PICTURE 9.	CM000085
00132	00813	02	B3W	PICTURE X(65).	CM000085
00133	00814	02	B10W	PICTURE X(9).	CM000085
00134	00815	02	B11W	PICTURE X.	CM000085
00135	00817	FD	C-WORK	RECORDING F BLOCK 45 RECORDS RECORD 80	CM000085
00136	00818			LABEL RECORDS STANDARD DATA RECORD CWRK.	CM000085
00137	00819	01	CWRK.		CM000085
00138	00820	02	C1W	PICTURE X(23).	CM000085
00139	00821	02	C2W	PICTURE X(9).	CM000085
00140	00822	02	C3W	PICTURE X(9).	CM000085
00141	00823	02	C4W	PICTURE X(6).	CM000085
00142	00824	02	C5W	PICTURE X(33).	
00143	01001			WORKING-STORAGE SECTION.	CM000085
00144	01002	77	AA-SW	PICTURE 9 VALUE 0.	CM000085
00145	01003	77	A-SW	PICTURE 9 VALUE 0.	CM000085
00146	01004	77	A-CNT	PICTURE XXXX VALUE SPACE.	
00147	01005	77	END-SW	PICTURE 9 VALUE 0.	CM000085
00148	01006	77	AB-SW	PICTURE 9 VALUE 0.	CM000085
00149	01007	77	B-CNT	PICTURE XXXX VALUE SPACE.	CM000085
00150	01008	77	AC-SW	PICTURE 9 VALUE 0.	CM000085
00151	01009	77	C-CNT	PICTURE X(6) VALUE SPACE.	CM000085
00152	01501			PROCEDURE DIVISION.	CM000085
00153	01502			OPEN INPUT HOOKUP PATCH.	CM000085
00154	01503			OPEN OUTPUT W-HOOK W-PATH.	CM000085
00155	01504			DISK-HK.	CM000085
00156	01505			READ HOOKUP AT END GO TO DISKH.	CM000085
00157	01506			WRITE WHOK FROM HOK.	CM000085
00158	01507			GO TO DISK-HK.	CM000085
00159	01508			DISKH.	CM000085
00160	01509			CLOSE HOOKUP W-HOOK.	CM000085
00161	01510			DISK-PT.	CM000085
00162	01511			READ PATCH AT END GO TO DISKP.	CM000085
00163	01512			WRITE WPAT FROM PAT.	CM000085
00164	01513			GO TO DISK-PT.	CM000085
00165	01514			DISKP.	CM000085
00166	01515			CLOSE PATCH W-PATH.	CM000085
00167	01516			OPEN I-O A-FILE B-FILE C-FILE.	CM000085
00168	01517			OPEN INPUT I-FILE.	CM000085

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00169 01519 READ I-FILE AT ENO GO TO IAINO. CM000085
00170 01520 IF OPTN = 'DELETEA' GO TO DELETE-A. CM000085
00171 01521 IF OPTN = 'A00A' GO TO A00-A. CM000085
00172 01522 IF OPTN = 'DELETEB' GO TO DELETE-B. CM000085
00173 01523 IF OPTN = 'A00B' GO TO A00-B. CM000085
00174 01524 IF OPTN = 'DELETEC' GO TO DELETE-C. CM000085
00175 01525 IF OPTN = 'A00C' GO TO A00-C. CM000085
00176 01601 IF OPTN = 'DELETEP' GO TO DELETE-P. CM000085
00177 01602 IAINO. CM000085
00178 01603 DISPLAY 'NO HEADER CARDS'. CM000085
00179 01604 STOP RUN. CM000085
00180 01605 DELETE-A. CM000085
00181 01606 READ I-FILE AT ENO GO TO IAINO. CM000085
00182 01607 IF OPTN = 'A00A' CLOSE A-FILE OPEN I-O A-FILE CM000085
00183 01608 GO TO A00-A. CM000085
00184 01609 IF OPTN = 'DELETEB' GO TO DELETE-B. CM000085
00185 01610 IF OPTN = 'A00B' GO TO A00-B. CM000085
00186 01611 IF OPTN = 'DELETEC' GO TO DELETE-C. CM000085
00187 01612 IF OPTN = 'A00C' GO TO A00-C. CM000085
00188 01613 IF OPTN = 'DELETEP' GO TO DELETE-P. CM000085
00189 01614 OA-READ. CM000085
00190 01615 READ A-FILE AT ENO GO TO AO-END. CM000085
00191 01616 IF A1 NOT = A10 GO TO OA-READ. CM000085
00192 01617 OAR1. CM000085
00193 01618 MOVE 'XXXX' TO A1. CM000085
00194 01619 REWRITE AIN. CM000085
00195 01619 READ A-FILE AT ENO CLOSE A-FILE OPEN I-O A-FILE CM000085
00196 01619 GO TO DELETE-A. CM000085
00197 016193 IF A1 = A10 GO TO OAR1. CM000085
00198 01620 GO TO DELETE-A. CM000085
00199 01621 AO-END. CM000085
00200 01622 DISPLAY 'NOT IN A-FILE' A10 A20. CM000085
00201 01623 GO TO DELETE-A. CM000085
00202 01701 A00-A. CM000085
00203 01702 MOVE 1 TO AA-SW. CM000085
00204 01703 OPEN OUTPUT A-WORK. CM000085
00205 017031 AO-A1. CM000085
00206 01704 READ A-FILE AT ENO GO TO AA-READ. CM000085
00207 017041 IF A1 = 'XXXX' GO TO AD-A1. CM000085
00208 01705 AA-READ. CM000085
00209 01706 READ I-FILE AT ENO GO TO IAINO. CM000085
00210 01707 IF OPTN = 'DELETEB' PERFORM FINIS-A THRU AX GO TO DELETE-B. CM000085
00211 01708 IF OPTN = 'A00B' PERFORM FINIS-A THRU AX GO TO A00-B. CM000085
00212 01709 IF OPTN = 'DELETEC' PERFORM FINIS-A THRU AX GO TO DELETE-C. CM000085
00213 01710 IF OPTN = 'A00C' PERFORM FINIS-A THRU AX GO TO A00-C. CM000085
00214 01711 IF OPTN = 'DELETEP' PERFORM FINIS-A THRU AX GO TO DELETE-P. CM000085
00215 01712 AA-A. CM000085
00216 01713 GO TO AA-C. CM000085
00217 01714 AA-C. CM000085
00218 01715 IF A1 < A10 GO TO AA-1. CM000085
00219 01716 IF A1 = A10 MOVE 1 TO A-SW. CM000085
00220 01717 AA-B. CM000085
00221 01718 WRITE AWRK FROM A-CAR0. CM000085
00222 01719 GO TO AA-READ. CM000085
00223 01720 AA-1. CM000085
00224 01721 IF A-SW = 1 MOVE 0 TO A-SW MOVE A1 TO A-CNT CM000085
00225 01722 GO TO AA-READ. CM000085

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00226	01723	WRITE AWRK FROM AIN.	CM000085
00227	017231	AA-2.	
00228	01724	READ A-FILE AT END GO TO AI-END.	CM000085
00229	017241	IF A1 = 'XXXX' GO TO AA-2.	
00230	01725	GO TO AA-A.	CM000085
00231	01801	AL-READ.	CM000085
00232	01802	READ A-FILE AT END GO TO AI-END.	CM000085
00233	018021	IF A1 = 'XXXX' GO TO AL-READ.	
00234	01803	IF A1 = A-CNT GO TO AL-READ.	CM000085
00235	01804	GO TO AA-A.	CM000085
00236	01805	AI-END.	CM000085
00237	01806	MOVE 1 TO END-SW.	CM000085
00238	01807	ALTER AA-A TO PROCEED TO AA-B.	CM000085
00239	01808	GO TO AA-B.	CM000085
00240	01809	FINIS-A.	CM000085
00241	018091	MOVE 0 TO A-SW.	
00242	01810	IF END-SW = 1 MOVE 0 TO END-SW GO TO AX.	CM000085
00243	018101	IF A1 > A10 GO TO AF-WRT.	
00244	01811	AF-READ.	CM000085
00245	01812	READ A-FILE AT END GO TO AX.	CM000085
00246	018121	IF A1 = 'XXXX' GO TO AF-READ.	
00247	018122	AF-WRT.	
00248	01813	WRITE AWRK FROM AIN.	CM000085
00249	01814	GO TO AF-READ.	CM000085
00250	01915	AX.	CM000085
00251	01816	EXIT.	CM000085
00252	01901	DELETE-B.	CM000085
00253	01902	READ I-FILE AT END GO TO IAINO.	CM000085
00254	01903	IF OPTN = 'ADDB' CLOSE B-FILE OPEN I-O B-FILE	CM000085
00255	01904	GO TO ADD-B.	CM000085
00256	01905	IF OPTN = 'DELETC' GO TO DELETE-C.	CM000085
00257	01906	IF OPTN = 'AODC' GO TO ADD-C.	CM000085
00258	01907	IF OPTN = 'DELETP' GO TO DELETE-P.	CM000085
00259	01908	OB-READ.	CM000085
00260	01909	READ B-FILE AT END GO TO OB-END.	CM000085
00261	01910	IF B1 NOT = B10 GO TO OB-READ.	CM000085
00262	01911	IF B2 NOT = B20 GO TO OB-READ.	CM000085
00263	019111	OBR1.	
00264	01912	MOVE 'XXXX' TO B1.	CM000085
00265	01913	REWRITE BIN.	CM000085
00266	019131	READ B-FILE AT END CLOSE B-FILE OPEN I-O B-FILE	
00267	019132	GO TO DELETE-B.	
00268	019133	IF B1 = B10 IF B2 = B20 GO TO OBR1.	
00269	01914	GO TO DELETE-8.	CM000085
00270	01915	OB-END.	CM000085
00271	01916	DISPLAY 'NOT IN B-FILE' B10 B20.	CM000085
00272	01917	GO TO DELETE-8.	CM000085
00273	02001	ADD-B.	CM000085
00274	02002	MOVE 1 TO AB-SW.	CM000085
00275	02003	MOVE 0 TO A-SW.	CM000085
00276	02004	MOVE 0 TO END-SW.	CM000085
00277	02005	OPEN OUTPUT B-WORK.	CM000085
00278	020051	AD-B1.	
00279	02006	READ B-FILE AT END GO TO ABB-READ.	CM000085
00280	020061	IF B1 = 'XXXX' GO TO AD-B1.	
00281	02007	ABB-READ.	CM000085
00282	02008	READ I-FILE AT END GO TO IAINO.	CM000085

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00283 02009 IF OPTN = 'DELETC' PERFORM FINIS-B THRU BX GO TO DELETE-C. CM000085
00284 02010 IF OPTN = 'ADOC' PERFORM FINIS-B THRU BX GO TO ADO-C. CM000085
00285 02011 IF OPTN = 'DELETP' PERFORM FINIS-B THRU BX GO TO DELETE-P. CM000085
00286 02012 AB-AB0. CM000085
00287 02013 GO TO AB-AB1. CM000085
00288 02014 AB-AB1. CM000085
00289 02015 IF B1 < B10 GO TO AB-LO. CM000085
00290 02016 IF B1 = B10 MOVE 1 TO A-SW. CM000085
00291 02017 AB-AB2. CM000085
00292 02018 WRITE BWRK FROM B-CARD. CM000085
00293 02019 GO TO AB-READ. CM000085
00294 02020 AB-LO. CM000085
00295 02021 IF A-SW = 1 MOVE 0 TO A-SW MOVE B1 TO B-CNT CM000085
00296 02022 GO TO RD-ABLO. CM000085
00297 02023 WRITE BWRK FROM BIN. CM000085
00298 020231 AB-LO1. CM000085
00299 02024 READ B-FILE AT END GO TO B-ENO. CM000085
00300 020241 IF B1 = 'XXXX' GO TO AB-LO1. CM000085
00301 02025 GO TO AB-AB0. CM000085
00302 02101 RO-ABLO. CM000085
00303 02102 READ B-FILE AT END GO TO B-ENO. CM000085
00304 021021 IF B1 = 'XXXX' GO TO RD-ABLO. CM000085
00305 02103 IF B1 = B-CNT GO TO RO-ABLO. CM000085
00306 02104 GO TO AB-AB0. CM000085
00307 02105 B-ENO. CM000085
00308 02106 MOVE 1 TO ENO-SW. CM000085
00309 02107 ALTER AB-AB0 TO PROCEED TO AB-AB2. CM000085
00310 02108 GO TO AB-AB2. CM000085
00311 02109 FINIS-B. CM000085
00312 02110 IF ENO-SW = 1 GO TO BX. CM000085
00313 021101 IF B1 > B10 GO TO FB-WRT. CM000085
00314 02111 FB-RO. CM000085
00315 02112 READ B-FILE AT END GO TO BX. CM000085
00316 021121 IF B1 = 'XXXX' GO TO FB-RD. CM000085
00317 021122 FB-WRT. CM000085
00318 02113 WRITE BWRK FROM BIN. CM000085
00319 02114 GO TO FB-RO. CM000085
00320 02115 BX. CM000085
00321 02116 EXIT. CM000085
00322 02201 DELETE-C. CM000085
00323 02202 READ I-FILE AT END GO TO IAINO. CM000085
00324 02203 IF OPTN = 'ADOC' CLOSE C-FILE OPEN I-O C-FILE CM000085
00325 02204 GO TO ADO-C. CM000085
00326 02205 IF OPTN = 'DELETP' GO TO DELETE-P. CM000085
00327 02206 DC-READ. CM000085
00328 02207 READ C-FILE AT END GO TO CO-ENO. CM000085
00329 02208 IF C4 NOT = C40 GO TO OC-READ. CM000085
00330 02209 MOVE 'XXXXXX' TO C4. CM000085
00331 02210 REWRITE CIN. CM000085
00332 02211 GO TO DELETE-C. CM000085
00333 02212 CO-END. CM000085
00334 02213 DISPLAY 'NOT IN C-FILE' C40. CM000085
00335 02214 GO TO DELETE-C. CM000085
00336 02301 ADO-C. CM000085
00337 02302 MOVE 1 TO AC-SW. CM000085
00338 02303 MOVE 0 TO ENO-SW A-SW. CM000085
00339 02304 OPEN OUTPUT C-WORK. CM000085

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00340	023041	AD-C1.	
00341	02305	READ C-FILE AT END GO TO ACC-READ.	CM000085
00342	023051	IF C4 = 'XXXXXX' GO TO AD-C1.	
00343	02306	ACC-READ.	CM000085
00344	02307	READ I-FILE AT END GO TO IAINO.	CM000085
00345	02308	IF OPTN = 'DELETEP' PERFORM FINIS-C THRU CX	CM000085
00346	02309	GO TO DELETE-P.	CM000085
00347	02310	AC-ACCO.	CM000085
00348	02311	GO TO AC-ACC2.	CM000085
00349	02312	AC-ACC2.	CM000085
00350	02313	IF C4 < C40 GO TO AC-LO.	CM000085
00351	02314	IF C4 = C40 MOVE 1 TO A-SW.	CM000085
00352	02315	AC-ACCI.	CM000085
00353	02316	WRITE CWRK FROM C-CARD.	CM000085
00354	02317	GO TO ACC-READ.	CM000085
00355	02318	AC-LO.	CM000085
00356	02319	IF A-SW = 1 MOVE 0 TO A-SW MOVE C4 TO C-CNT	CM000085
00357	02320	GO TO LO-ACRO.	CM000085
00358	02321	WRITE CWRK FROM CIN.	CM000085
00359	023211	AC-LO1.	
00360	02322	READ C-FILE AT END GO TO AC-END.	CM000085
00361	023221	IF C4 = 'XXXXXX' GO TO AC-LO1.	
00362	02323	GO TO AC-ACCO.	CM000085
00363	02401	AC-END.	CM000085
00364	02402	ALTER AC-ACCO TO PROCEED TO AC-ACCI.	CM000085
00365	02403	MOVE 1 TO END-SW.	CM000085
00366	02404	GO TO AC-ACCI.	CM000085
00367	02405	LO-ACRO.	CM000085
00368	02406	READ C-FILE AT END GO TO AC-END.	CM000085
00369	024061	IF C4 = 'XXXXXX' GO TO LO-ACRO.	
00370	02407	IF C4 = C-CNT GO TO LO-ACRO.	CM000085
00371	02408	GO TO AC-ACCO.	CM000085
00372	02409	FINIS-C.	CM000085
00373	02410	IF END-SW = 1 MOVE 0 TO END-SW GO TO CX.	CM000085
00374	024101	IF C4 > C40 GO TO FC-WRT.	
00375	02411	FC-RO.	CM000085
00376	02412	READ C-FILE AT END GO TO CX.	CM000085
00377	024121	IF C4 = 'XXXXXX' GO TO FC-RO.	
00378	024122	FC-WRT.	
00379	02413	WRITE CWRK FROM CIN.	CM000085
00380	02414	GO TO FC-RO.	CM000085
00381	02415	CX.	CM000085
00382	02416	EXIT.	CM000085
00383	02501	DELETE-P.	CM000085
00384	02502	IF AA-SW = 1 CLOSE A-WORK GO TO OP-BA.	
00385	02503	OPEN OUTPUT A-WORK.	CM000085
00386	02504	CLOSE A-FILE OPEN I-O A-FILE.	CM000085
00387	02505	OP-ARD.	CM000085
00388	02506	READ A-FILE AT END GO TO AP-END.	CM000085
00389	02507	IF A1 = 'XXXX' GO TO OP-ARD.	
00390	02508	WRITE AWRK FROM AIN.	CM000085
00391	02509	GO TO OP-ARD.	CM000085
00392	02510	AP-END.	CM000085
00393	02511	CLOSE A-WORK.	CM000085
00394	02512	OP-BA.	CM000085
00395	02513	IF AB-SW = 1 CLOSE B-WORK GO TO OP-CA.	
00396	02514	OPEN OUTPUT B-WORK.	CM000085

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00397	02515	CLOSE B-FILE OPEN I-O B-FILE.	CM000085
00398	02516	BP-BRO.	CM000085
00399	02517	READ B-FILE AT END GO TO BP-END.	CM000085
00400	02518	IF B1 = 'XXXX' GO TO BP-BRO.	CM000085
00401	02519	WRITE BWRK FROM BIN.	CM000085
00402	02520	GO TO BP-BRO.	CM000085
00403	02521	BP-END.	CM000085
00404	02522	CLOSE A-WORK.	CM000085
00405	02523	OP-CA.	CM000085
00406	02524	IF AC-SW = 1 CLOSE C-WORK GO TO DPLO.	
00407	02525	OPEN OUTPJT C-WORK.	CM000085
00408	02601	CLOSE C-FILE OPEN I-O C-FILE.	CM000085
00409	02602	OP-CRD.	CM000085
00410	02603	READ C-FILE AT END GO TO CP-END.	CM000085
00411	02604	IF C4 = 'XXXXXX' GO TO OP-CRD.	CM000085
00412	02605	WRITE CWRK FROM CIN.	
00413	02606	GO TO OP-CRD.	CM000085
00414	02607	CP-END.	CM000085
00415	02608	CLOSE C-WORK.	CM000085
00416	02609	DPLO.	CM000085
00417	02610	OPEN I-O W-HOOK.	CM000085
00418	02612	READ W-HOOK AT END GO TO WH-END.	CM000085
00419	02613	OP-I-RO.	CM000085
00420	02614	READ I-FILE AT END GO TO IF-END.	CM000085
00421	02615	OPEN I-O C-WORK.	CM000085
00422	02616	OPC-RD.	CM000085
00423	02617	READ C-WORK AT END GO TO OP-CWX.	CM000085
00424	02618	IF DELPARM NJT = C2W GO TO OPC-RD.	CM000085
00425	02619	MOVE SPACE TO C2W.	CM000085
00426	02620	REWRITE CWRK.	CM000085
00427	02621	GO TO OPC-RD.	CM000085
00428	02622	OP-CWX.	CM000085
00429	02623	CLOSE C-WORK.	CM000085
00430	02624	OPEN I-O B-WORK.	CM000085
00431	02701	OPB-RD.	CM000085
00432	02702	READ B-WORK AT END GO TO OP-BWX.	
00433	02703	IF DELPARM NJT = B10W GO TO OPB-RD.	CM000085
00434	02704	MOVE SPACE TO B10W.	CM000085
00435	02705	REWRITE BWRK.	
00436	02706	GO TO OPB-RD.	CM000085
00437	02707	OP-BWX.	CM000085
00438	02708	CLOSE B-WORK.	CM000085
00439	02709	OP. IF DELPARM NJT = WH2 GO TO OP-OPH.	CM000085
00440	02710	MOVE 'XXXXXXXXXX' TO WH2.	CM000085
00441	02711	OPEN I-O W-PATH.	CM000085
00442	02712	OP-PTRO.	CM000085
00443	02713	READ W-PATH AT END GO TO WP-END.	CM000085
00444	02714	IF WP6 = WH4 GO TO ITEM-EQ.	
00445	02716	GO TO OP-PTRO.	CM000085
00446	02717	ITEM-EQ.	CM000085
00447	02718	MOVE 'XXXX' TO WP2.	CM000085
00448	02719	REWRITE WPAT.	CM000085
00449	02720	GO TO OP-PTRO.	CM000085
00450	02721	OP-OPH.	CM000085
00451	02722	READ W-HOOK AT END GO TO WH-END.	CM000085
00452	02723	GO TO OP.	CM000085
00453	02724	WP-END.	CM000085

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00454	02725	CLOSE W-PATH.	CM000085
00455	02801	REWRITE WHOK.	CM000085
00456	02802	GO TO OP-OPH.	CM000085
00457	02803	WH-END.	CM000085
00458	02804	CLOSE W-HOOK.	CM000085
00459	02805	OPEN I-O W-HOOK.	CM000085
00460	02806	GO TO OPI-RO.	CM000085
00461	02807	IF-END.	CM000085
00462	02808	CLOSE A-FILE B-FILE C-FILE.	CM000085
00463	02810	CLOSE I-FILE.	CM000085
00464	02811	CLOSE W-HOOK.	CM000085
00465	02812	OPEN I-O W-HOOK W-PATH.	CM000085
00466	02813	OPEN OUTPUT HK-OUT PT-OUT.	CM000085
00467	02814	IF-RDH.	CM000085
00468	02815	READ W-HOOK AT END GO TO ALL-HK.	CM000085
00469	02816	IF WH2 = 'XXXXXXXX' GO TO IF-RDH.	CM000085
00470	02817	WRITE OHOK FROM WHOK.	CM000085
00471	02818	GO TO IF-RDH.	CM000085
00472	02819	ALL-HK.	CM000085
00473	02820	CLOSE W-HOOK.	CM000085
00474	02821	CLOSE HK-OUT.	CM000085
00475	02822	IF-RDP.	CM000085
00476	02823	READ W-PATH AT END GO TO ALL-PT.	CM000085
00477	02824	IF WP2 = 'XXXX' GO TO IF-RDP.	CM000085
00478	02825	WRITE OPAT FROM WPAT.	CM000085
00479	02901	GO TO IF-RDP.	CM000085
00480	02902	ALL-PT.	CM000085
00481	02903	CLOSE W-PATH	CM000085
00482	02904	CLOSE PT-OUT.	CM000085
00483	02905	STOP RUN.	CM000085

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13. ABSTRACT A system of digital computer programs developed to aid in the design and documentation of instrumentation systems is described. Included are brief descriptions of system concepts and capabilities, required system inputs, explanations of system outputs and information contained therein, and system utilization. This system is currently in use by the ETF J-Instrument Branch of the Arnold Engineering Development Center.			

14.

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